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A study of Chilean teenagers' mobile phone use in school

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“I’d die without it”

A study of Chilean teenagers’ mobile phone use in school

By: Paulina Andrea Ruiz Cabello

**A dissertation submitted to the University of Bristol in accordance with the
requirements of the degree of Doctor of Philosophy in the Faculty of Social
Sciences and Law.**

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Abstract

The present study explores how Chilean teenagers (15-16 years old) negotiate their mobile phone use in school settings. A sociocultural and practice theory perspective was used to define the use of mobile phones as a multi-layered and relational practice within the cultural worlds of schooling and everyday life. In a context where personal devices are becoming a mundane aspect of schools, and new perspectives about connected digital lives of young people are being discussed, this research offers an alternative viewpoint through a holistic and interconnected way of seeing the phenomenon from teenagers' point of view.

This study used an ethnographic methodological approach to examine teenagers' phone negotiation process in two schools in Santiago, Chile. The research questions were: What elements in the school world are constraining or enabling teenagers' mobile phone use?; How are teenagers negotiating their use of mobile phones in classes with teachers?; How are teenagers orchestrating different positionalities in their use of mobile phones in school?

The researcher spent three months with two Year-11 classes (one from each school) and their teachers, and, more closely, with eight students. Individual and group interviews, participant observations in and out of the classroom, and co-analysis of data with participants were conducted during fieldwork. A combination of thematic, event and narrative analysis methods were carried out to explore and construct the connections between young people using their phones and the context (school/classroom) within the cultural worlds they participate in.

The study reveals that students' mobile phone use finds a place in school because a *negotiation in-practice* is occurring, in which the interests of the schools, teachers, students and parents intersect and pull in diverse directions. In this context, students are aware of the gaps and possibilities for their phone use. However, the study also shows that the phone use can be understood as a prioritisation of ways of being and participation in cultural worlds of school, peers and family life, and not as an oppositional practice to school. The way teenagers use their mobile phones in schools, including strategies to keep using it, are grounded in who they are and who they want to be as students, peers and daughters/sons. These findings suggest the positionalities between families and schools, and students and teachers, and students' school experiences are being redefined around the phone use in school. From this perspective, there is a need to educate about phone use in different settings, and to define phone regulations that incorporate the different actors involved, including students.

Author's declaration

I declare that the work in this dissertation was carried out in accordance with the requirements of the University's Regulations and Code of Practice for Research Degree Programmes and that it has not been submitted for any other academic award. Except where indicated by specific reference in the text, the work is the candidate's own work. Work done in collaboration with, or with the assistance of, others, is indicated as such. Any views expressed in the dissertation are those of the author.

SIGNED:

DATE:

Dedication

To Luke. Running along this piece of work, there were us.

To my inner self. A kind reminder that I can do it.

Acknowledgements

I would like to express my gratitude to my supervisors Dr. Sally Barnes and Dr. Sue Timmis from the University of Bristol, for their kind guidance, insightful feedback, and support. Thank you for encouraging me to explore and play with different ideas around my field. Thank you also for the engaging debates and challenging questions during our supervision meetings. They gave me new insights to my work, which refine it in unexpected and positive ways. In the same way, I would like to thank Dr. Alvaro Salinas, from *Pontificia Universidad Católica de Chile*, who has always believed in my work and encouraged me to start a PhD.

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Chapter 1: Introduction

This study explores how Chilean teenagers are negotiating their everyday mobile phone use in their schools. By doing so, it seeks to understand the interconnection and boundary crossing between the cultural worlds of schooling and everyday lives, in which young people are participating through their mobile phone use in schools.

This study adopts a socio-cultural and relational perspective on identities and mobilities, as well as an ethnographic methodological approach to study the digital practices of Year-11 students (15-16 years old) at school. This entails examining how these practices with mobile phones happen in interconnected cultural worlds, where students position themselves in multiple ways, in a setting where these practices may not be expected. This is a study of how being a student and a young person are inseparable when using mobile phones in the school; therefore, it is also an exploration of how schools allow and constrain their use.

This study is motivated, firstly, by my own experience as a media-engaged teenager in the late 1990s in Chile. In those days, part of my class –myself included– was accessing the Internet for leisure, communication, and schoolwork, while bringing in some digital cameras and phones for the first time. I felt those experiences were giving us the chance to express ourselves in new and diverse ways. Secondly, through my professional experience in the educational research field in Chile and my training in Media Studies and Sociology, I came to see the importance of giving students a voice to discuss their school lives, as well as the relevance of seeing school as a space for everyday digital life. This is particularly important when young people's technology use, not to mention research and public debate on this issue, have changed so much since I went to school. My friends' and my technology use in school was mainly sporadic, hidden, and almost totally unconnected from teachers' and school practice –and probably because of this, in some respects, riskier. With the expansion of mobile and personal devices, and those technologies coming inside the school, young people's use of them seems far from hidden or sporadic. To inform academic and public debates on the risks, concerns, and potential of technology use for young people's lives in and out of school, we need more research and discussion about what it means to be a media-engaged young person/student in school. Moreover, in the light of disconnects between school and young people's digital lives and the disruptive potential of technology, we also need more research on how they are navigating institutional and adult worlds.

1.1. Teenagers' everyday use of mobile phones

Mobile phones have become a taken-for-granted part of contemporary society (Ling & Baron, 2013; Ling, 2012). This means that their use has become a legitimised practice that has created reciprocal expectations and social conditions needed for its preservation (Ling, 2012). In this process, teenagers have been leading their expansion and adoption since their appearance in the mid-90s in developing and developed countries (Vanden Abeele, 2016; Ling, 2010).

Mobile phone penetration is approaching 100% among 12-18-year-olds in many parts of North America (Lenhart, Duggan et al., 2015); Europe (GSMA & NTT DOCOMO, 2015); Asia-Pacific (GSMA & NTT DOCOMO, 2013); and in Latin American countries such as Chile (GSMA & NTT DOCOMO, 2013; Halpern, Piña, Vásquez, Ramírez, & Castro, 2016). Moreover, among American and European teenagers, mobile phones have become a primary channel to access the Internet (Ofcom, 2016; GSMA & NTT DOCOMO, 2015; Mascheroni & Cuman, 2014), although smartphones –mobile phones with wireless Internet access– are still not as widespread as “basic phones” (Lenhart, Duggan et al., 2015: 2) among this age group (Ofcom, 2016).

Apart from the ubiquity of mobile phones, their relevance among teenagers is also related to how embedded these devices are in their lives (Eisenhart & Allaman, 2018; Bond, 2014; Ribak, 2013). This means that their use has become an “organic part” (Oksman & Rautiainen, 2003:293) of everyday activities for this age group, namely maintenance of and coordination with social groups, such as friends and parents, and self-expression, including leisure and belonging purposes (Kalogeraki & Papadaki, 2015; Mesch, 2013; Ling & Bertel, 2013; Ito et al., 2008).

Research on mobile communication has richly developed a specific niche for the study of teenagers and their phone use. However, I suggest that an approach that connects mobile phone practices and the contexts where the lives of teenagers are taking place is still limited. More specifically, a perspective that considers the overlap between the everyday phone use and the spaces where it takes place has been neglected. This in-situ element is crucial given that one key feature identified in the field is the expansion of social and cultural realms into others (Everri, 2017; Özkul, 2016; Wajcman, Bittman, & Brown, 2008). With a few notable exceptions in the field of mobile phones and youth – such as Ito and Okabe's (2005) chapter on the use of mobile phones by teenagers in public spaces, or Kupiainen's (2011) research on students' creative use of phones at school– not much research has been conducted into how teenagers are adjusting and negotiating their phone use in the settings they inhabit. Using Selwyn & Bulfin's (2016) distinction between the use of digital technologies *for* school and *in school*, the field of mobile communication has been prolific in understanding the uses and importance of phones *for* teenagers' lives, but not so much *in* specific settings.

The lack of an in-situ and negotiated approach can be related to some limitations in the study of teenager's everyday phone use. These include researchers not considering enough local contexts (Vanden Abeele, 2016), as well as prioritisation of psychology theories over cultural and space-related approaches (Vanden Abeele, 2016; Ribak, 2013; Ling & Haddon, 2008). In this regard, it is possible to claim that there is a lack of approaches focusing on the boundary crossing between the using mobile phones and the contextual rules, expectations, constraints, and enablers taking place in local contexts.

The present study aims to contribute to an understanding of the everyday use and negotiation of mobile phones by Chilean teenagers in a specific setting in which it has been problematic and regulated, namely the school (Mascheroni & Cuman, 2014). In doing so, this study considers research on youth and digital technologies exploring the (dis)connections between everyday digital practices within and across different settings (e.g. Davis, Ambrose, & Orand, 2017; Selwyn & Bulfin, 2016; Ito et al., 2010). Although more research is needed on young people's everyday use and negotiation of personal devices in school (Selwyn, Nemorin, Bulfin & Johnson, 2017), I would argue, an approach has been developing among studies on curricular use of technologies that serves to examine phone use in school (e.g. Jocius, 2017; Bjørgen & Erstad, 2015). This is an approach that sees digital practices and the media-engaged young person in the intersection of cultural worlds of schooling and everyday life (Holland, Lachicotte, Skinner, & Cain, 1998; Leander, Phillips, & Taylor, 2010).

1.2. The everyday use of mobile phones within school settings

Studies suggest that the everyday use of phones by teenagers in schools is pervasive despite the existence of regulations on their use (Ott, Magnusson, Weilenmann, & af Segerstad, 2018; Halpern, Piña, Vásquez, et al., 2016; Mascheroni & Cuman, 2014). Their presence and use by teenagers are problematic from the perspective of teachers, school administrators, and even educational authorities, since there are several risks that schools want to avoid. These parallel general concerns related to media and young people, such as student access to inappropriate content (Ko, Choi, Yang, Lee & Lee, 2015; Gao, Yan, Zhao, Pan & Mo, 2014), sexting and cyberbullying (Vanden Abeele, Campbell, Eggermont, & Roe 2014; Lenhart, Ling, Campbell & Purcell, 2010), and isolation (Haddon & Vincent, 2014). However, schools' fears are also associated with issues that are already taking place: class disruptions (Knorr, 2018; Gao et al., 2014), cheating on tests (Thomas & Muñoz, 2016; Common Sense Media, 2009), or negative effects on academic performance (Beland & Murphy, 2016). These difficulties also exist in places where Bring Your Own Device (BYOD) programmes are in place, such as Scandinavia (European Parliament, 2015; Sjøby, 2014) and Australia (Janssen & Phillipson, 2015). There, schools concentrate on providing and supporting tablets and laptops, but teenagers are

bringing their mobile phones in anyway, in some cases outnumbering school-provided mobile devices (Bulfin, Johnson, Nemorin, & Selwyn, 2016).

Thus, it is common for schools in different countries to define and enforce rules that restrict or forbid the students' phone use (Gao et al., 2014; Lenhart, 2012; Common Sense Media, 2009). For instance, Gao et al. (2014) report that in China most schools regulate phone use (83.78% of elementary schools, 75.56% of middle schools, and 63.46% of high schools). Likewise, in the United States, 65% of teenagers mention that there is some kind of phone ban in their high schools (Common Sense Media, 2009), while 85% of European children and teenagers report total or partial phone use bans (54% and 31%, respectively) (Haddon & Vincent, 2014). Such bans, however, are the responsibility of each school. For example, in the UK, each school must decide how to proceed in this respect, imposing either total or less restrictive bans (Khomami, 2017). This situation results in inconsistent regulations among and within countries.

Nevertheless, the issue has attracted attention in educational policy circles. In September 2018, a law was passed in France extending to state primary schools (6-11 years old) the classroom phone ban already in force in middle schools (11-15 years old), which now also applies to breaks and lunchtime (Chrisafis, 2018; Busby, 2018). At present, if these students decide to bring their phones to school anyway, they must remain switched off or in a locker, except for emergencies. Otherwise, teachers can confiscate them for a day. It is too early to know the effects of this law, however, the ban has been defined by French authorities as a public health measure aimed at encouraging children to spend more time playing and socialising during breaks, decreasing distractions in classes, reducing social media use, and combatting cyberbullying (BBC, 2018, 0:14; Busby, 2018; Sky News, 2017).

These kinds of bans do not come without opposition. News articles report that, since the law was announced in December 2017, French head teachers, groups representing parents, teachers' unions, and students themselves have communicated their misgivings and showed scepticism about the measure (BBC, 2018, 0:27; Rubin & Peltier, 2018; The Local, 2017; Willsher, 2017). They have raised concerns about the logistics of its implementation and doubts about the necessity of the ban since some schools have already found less restrictive ways to manage the issue. Parents have voiced their opposition to forbidding a device that serves them to keep in touch with their children. Teachers and head teachers see that the ban may hinder the educational use of these devices in classes. Teachers have also shown their concerns about accountability in enforcing the regulation, while also casting doubt on the potential benefits of secluding students from technology-mediated interactions in a digital society. Students are concerned about losing a source of entertainment and socialisation with school peers, especially on breaks.

Another attempt to ban mobile phone centrally took place in 2006, when the then mayor of New York –Michael Bloomberg– proposed a similar measure. However, the enforcement of this law was inconsistent due to opposition from schools and parents (Khomami, 2017). His successor –Bill de Blasio– lifted the ban in 2015 mainly because it proved to have produced unintentional inequality, in a context where most schools were not enforcing it. De Blasio claimed that this was because, in practice, the law was only enforced in schools with metal detectors in low-income areas (Associated Press in New York, 2015). As a counter example of the tensions surrounding the decision to ban phones, a study in the UK (Beland & Murphy, 2016) showed that, in schools where mobile phones were banned, the test scores of 16-year-olds improved by 6.41%, with low income and low-achieving students gaining the most from the ban.

Research in this field has provided evidence of these sometimes-contradictory perspectives. Teachers recognise the importance of phones in their students' lives and see the educational potential they have or can have for their teaching practice (Black-Fuller, Taube, Koptelov, & Sullivan, 2016; O'Bannon & Thomas, 2014). However, at the same time, they want their students to self-regulate their use to avoid interruptions in their classes, and schools to be clear in terms of accountability if something goes wrong. For example, in Chile, some head teachers and administrators report, that in part, it is difficult to control phone use because it is not straightforward to determine who is responsible for its use: the school and teachers or the families (Halpern, Piña, & Vásquez, 2016). As for parents and students, they see the importance of staying in contact during school hours or having mobile phones available in case of emergency (Vandoninck, Nouwen, & Zaman, 2018; Nelson, 2010).

All these examples show that the issue is not a binary problem between the school practice and the youth practices related to students' phone use. Diverse forces interact when it comes to phone use. Mobile phones are communications devices and, in some cases, "mini-computers" (O'Bannon & Thomas, 2014:16) that serve to organise people's social lives face-to-face and online, enable students to connect with their parents, make self-expression easier, and facilitate teaching. Then, what do mobile phones mean for teenagers themselves and how do they manage to use such a contested technology in school settings? More specifically, what about Chilean teenagers? Some evidence shows that phone bans are less restrictive for older students (Vandoninck et al., 2018), which prompts the question about whether teenagers have more freedom in organising and prioritising their digital lives at school. How do they negotiate their engagement with mobile phones in school settings? In bringing a connected and relational perspective (Holland et al., 1998; Leander et al., 2010) to research on teenagers' phone use in school settings, this study contributes to answering these questions. In particular, with a deeper understanding of how teenagers are considering the diverse forces or

resources at stake to decide how to use and negotiate their phones at school, from their perspectives as young people and students.

1.3. Mobile phones in the Chilean context

Chile is a Spanish-speaking country located in South America (Appendix A). In 2017, it had an estimated population of 17,500,000 inhabitants (INE, 2018a). In general terms, it can be described as a highly stratified society, particularly in terms of incomes and educational opportunities (OECD, 2017a; The World Bank, 2014).

Despite the above, among developing countries, Chile has long been at the forefront in terms of Internet users and mobile phone ownership (Bringué, Sádaba, & Tolsá, 2011), even equalling some developed countries (Poushter, 2016). In the Latin American region, Chile has one of the highest mobile phone subscriber rates (91%) together with Uruguay (92%) and Argentina (91%) (GSMA, 2017). However, in terms of smartphone adoption, Chile is on the lower half of the list with 47% (GSMA, 2017).

Regarding Chilean children and teenagers, national-scale survey data show that despite socio-economic segregation in technology access and skills (SIMCE-TIC, 2014; Claro et al., 2012), they have higher Internet access levels than the general population and go online more frequently as well (Livingstone, Kroeger, Stoilova, & Yu, 2017; Halpern, Piña, & Vásquez, 2016). In relation to mobiles, the scarce evidence suggests that Chilean teenagers' phone use forms part of a global *Mobile Youth Culture* (Vanden Abeele, 2016) in terms of access and the importance given to the device in their daily lives (Halpern, Piña, Vásquez, et al., 2016; Ureta, Artopoulos, Muñoz & Jorquer, 2011). A survey with teenagers aged 12-18 years shows that 95.3% of them own a mobile phone and 98.2% have at least one social media account (Halpern, Piña, Vásquez, et al., 2016). Texting is part of their daily communication routines and mobile phones are seen a status symbol (Ureta et al., 2011; Muñoz, 2010).

Despite national trends, very little is known about the cultural, social, and qualitative aspects of young people's use of digital technologies (Sánchez, Salinas, Contreras & Meyer, 2011; Ruiz, 2013; Ibieta, Isaacs, Hinostroza, Labbé, & Claro, 2013). Ureta et al. (2011) claim that the Mobile Youth Culture of Chilean youth is complex and interesting, but that it has not been sufficiently researched. Thus, the present study is aimed at reducing this gap through an ethnographic exploration that will yield evidence on cultural and social aspects of the everyday use of mobile phones among Chilean teenagers in school. The literature shows that 12-18 year-old students are bringing their phones to school and

most declare that some kind of regulation exists in their schools (Halpern, Piña, Vásquez, et al., 2016). As in other countries, school administrators and teachers regard the phone use as an unresolved issue (Araya-Castillo & Pedreros-Gajardo, 2013; Halpern, Piña, & Vasquez, 2016). They report that their students are using their phones in class and breaking Internet security regulations on their phones and school computers. However, no study was found which shows how students experience this situation in school.

The Chilean school context is interesting for this study. First, we have teenagers bringing their phones to schools on a daily basis. Second, the curricular integration of digital technologies in schools is still limited in Chile, especially in secondary education¹ (Bellei & Morawietz, 2016; SIMCE-TIC, 2014; Hinostroza, Matamala, Labbé, Claro, & Cabello, 2014). Thus, the Chilean educational context is interesting because of the limited use of technologies in the classroom, which stands in contrast with the majority of the school contexts taken into account in studies on digital technologies and mobile phones. These include studies conducted in countries with Bring Your Own Device (BYOD) programmes –like Sweden, New Zealand, and Australia– (e.g. Olofsson, Lindberg, & Fransson, 2017; Hodge, Robertson, & Sargisson, 2017; Bulfin et al., 2016) or studies on curricular activities or projects that require mobile phones (e.g. Philip & Garcia, 2015). Focusing on everyday digital practices of teenagers in a school environment with a limited curricular use of digital technologies will provide a different way of seeing the negotiation of personal device in school, while also emphasising the cultural part of this process over the pedagogical one (Chan, Walker, & Gleaves, 2015).

¹ From the early 1990s onwards, Chile has had an educational technology policy in schools called *Enlaces* (“Links” in English), which covers state-subsided schools (approx. 95% of schools in Chile, Appendix B.2.). This policy has equipped schools with projectors, Internet access, computers, and trained teachers for the curricular use of technologies (Jara, 2013). However, teachers’ curricular technology use is still limited.

1.4. Aim and research questions

The aim of this study is to explore how Chilean teenagers negotiate their everyday phone use in the school world.

In this study, the term “everyday” is defined in opposition to the educational practice of school, but not as something that takes place outside of it or as something totally disconnected. In other words, the everyday use of mobile phones alludes to those digital practices that can shape or be shaped by the school environment but are not part of formal school programmes or projects. The everyday use of phone may include educational purposes and be tolerated by teachers, but these practices have become part of classes through the unexpected presence of mobile phones in schools, and not because teachers or schools wanted them to be there. In that regard, these practices form part of what students are bringing into the school space; therefore, they are shaping the school world as well.

This study is intended to make a contribution through its focus on digital practices that makes the school as a space for the everyday use of digital technologies, and therefore for digital lives. The negotiation process will be understood in this study as a boundary crossing between the world of school and the everyday world teenagers are engaging in their use of mobile phones. Also, it will be understood as an orchestration of positionalities (Holland et al., 1998), which means seeing the boundary crossing from the perspective of the phone-user situated and participating in those worlds.

1.4.1. Research Questions

The following research questions have an exploratory basis to understand the negotiation of the everyday use of mobile phones by Chilean teenagers in school settings. The argument here is that we are dealing with a multi-layered phenomenon that encompasses issues connected with school regulations, informal and formal learning, and youth digital and mobile communication cultures. Because of this, it is necessary to collect data that make it possible to see students’ phone use as connected to different levels and the different positionalities –as students and teenagers– they are adopting and producing in their phone use.

RQ1: What elements in the school world are constraining or enabling teenagers' mobile phone use?

Every day we learn more about how schools and teachers are reacting to their students' use of mobile phones. However, in the current landscape, inconsistencies exist between schools even in the same country. To understand students' negotiation process, it is necessary to explore then the key factors and resources associated with the use of mobile phones in the schools they attend coming from the worlds of school and everyday life.

RQ2: How are teenagers negotiating their use of mobile phones in classes with teachers?

The relationship between teachers and students is key in an age group where more freedom is given in terms of mobile phone use in comparison to younger people, and where the classroom constitutes the most contested space inside the school setting. Thus, the relationship between teachers and students use represents the ultimate boundary crossing practice in the negotiation of phone use.

RQ3: How are teenagers orchestrating different positionalities in their use of mobile phones in school?

In this study, the use of mobile phones in school is regarded as participation in worlds of everyday and schooling. This means that teenagers generate self-understanding and are positioned in diverse ways in those worlds (Holland et al., 1998). Using this framework will also help understand phone negotiation from the individual perspective of students as media-engaged users within and beyond the school and classroom. This connected and relational approach –in the school world– entails asking them how they see their phone use in this constraining space and how they manage to answer to those worlds they participate in.

1.5. Dissertation outline

This dissertation is divided into nine chapters. The current chapter, **Chapter 1**, introduced the present study on students' negotiation of their mobile phone use in two Chilean schools. Here, research aims and questions were presented, together with an overview of the importance of this study and the knowledge gaps that it will help bridge.

Chapter 2 maps the context of the study through a review of the relevant literature. Via a review of current research and the main debates on mobile communication and teenagers, along with context-based studies of young people's technology and phone use within the school, the main gaps addressed by this study will be presented. A final section on studies that adopt a connected and relational approach to examine digital practices shows that it is necessary to adopt such a perspective to explore teenagers' phone use within schools.

Chapter 3 lays out the philosophical underpinnings and the conceptual approach used in this study. The latter is a sociocultural and practice theory framework that draws on the concepts of *cultural worlds*, *positional identities* and the notion of *mobilities* in young people's use of digital technologies.

Chapter 4 explains the methodological approach chosen for this study, including how access was gained to the two study schools and how data were collected. This is followed by a section on data analysis, which discusses the methods and procedures used to interpret data. Finally, the chapter presents a reflection on the ethical aspects considered throughout the study, such as informed consent, researcher's positionality, and rapport with participants.

The findings of the study are presented in **Chapters 5, 6, and 7**. Each chapter addresses one of the research questions: mobile phones in the world of school; the negotiation process regarding phone use in the relationship between teachers and students; and the orchestration of positionalities with respect to phone use within the school.

Findings are discussed in **Chapter 8**. It is organised around the main topics elicited by the study's findings, which are discussed in relation to the theory and literature reviewed.

Finally, I present my conclusions in **Chapter 9**. The chapter comprises an overview of the findings, a discussion of the study's contributions and limitations, and some suggestions for further research.

Chapter 2: Teenagers' technology and phone use in school settings

This chapter reviews different research areas which the present study draws on. By going through these research areas, two aims will be covered. First, providing a review of the main literature on teenagers' everyday mobile phone use and digital practices in school. Second, paving the way for the generation of the study's conceptual framework.

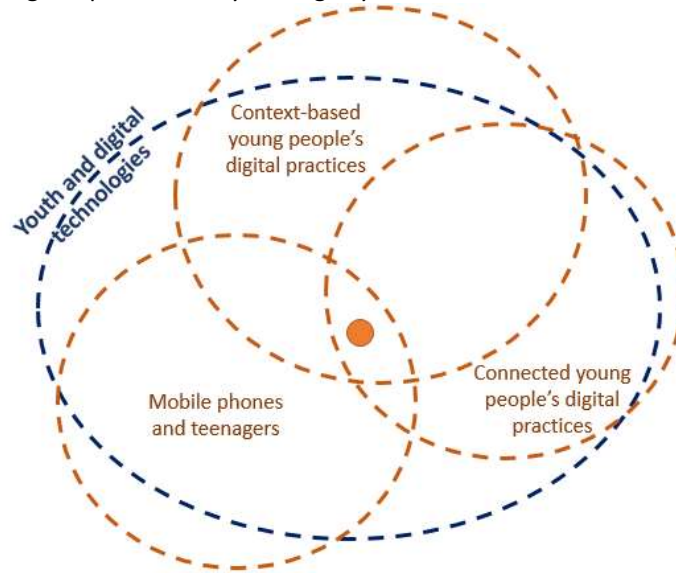
The chapter is structured in four sections. The first section positions the present study within intersecting areas of research on youth and digital technologies. The second section lays out how the everyday use of mobile phones by teenagers has been conceptualised and researched, highlighting the lack of a localised approach. The third section reviews key empirical work on the use and negotiation of digital technologies and mobile phones by teenagers in school settings. The final section presents studies redefining young people's experiences with digital technologies in school, which outline the relational and connected approach adopted by the present study. The Chilean literature on mobile phones and school-based digital practices is limited. For this reason, it will be included throughout this chapter.

2.1. Positioning this study

The present study draws on intersecting areas of work that focus on the study of digital technologies and young people², as shown in figure 2.1. These areas can be analytically divided into three groups: mobile phone use by teenagers; context-based studies on young people's digital practices; and studies using a connected approach to examine young people and children's use of technologies.

² The terms *youth* and *young people* are used to refer to teenagers. Firstly, to distinguish them from children (c.f. Bond, 2014; Davies & Eynon, 2013). Secondly, to emphasise the focus of the present study on teenagers as social actors (cf. Livingstone & Sefton-Green, 2016). The term *student(s)* will be used to emphasise that role within the school and when it is the term employed in the literature reviewed.

Figure 2.1.: Positioning the present study among key research areas.



The first reason to draw on different areas in this study is that no single one focuses on the everyday mobile phone use in school settings. This is related to an important feature of the field, namely that the study of the use of phones and other digital technologies by teenagers was until recently almost on different tracks. As will become clearer in the following pages, each track falls short when studying digital practices with phones in school settings.

Most research on mobile phones and teenagers has been conducted within the field of Mobile Communication (Ling & Bertel, 2013; Ito, Okabe, Matsuda, 2005). This area has provided a good account of teenagers' everyday phone use. However, there is still limited research on how contextual features constrain or facilitate their use and on how young people negotiate or manage to keep using their phones at school. Within studies on digital technologies and teenagers more broadly, there has been prolific work on their use in a variety of contexts (e.g. Bond, 2014 Ito et al., 2010), including schools (e.g. Bulfin et al., 2016). However, only a few studies have focused on personal devices, especially mobile phones, and their relationship with students' everyday lives (cf. Kupiainen, 2011).

The second reason to draw on different areas within studies on Young People and Digital Technologies has to do with how to understand the interconnection between the everyday use of mobile phones and school practice. In other words, how to conceptualise and study teenagers' phone use within school settings, where it intersects with multiple and sometimes contradictory desires and expectations related to communication, youth culture, school regulations, and the educational use of technologies. In this regard, instead of adopting an antagonistic perspective that separates everyday and school digital practices, this study considers them to be connected, crossed by the young people using the device and their practices (cf. Bjørgen & Erstad, 2015; Bulfin & North, 2007). This entails

understanding that teenagers, in their use of phones in school, are not experiencing a total disconnect between being students and young people (Jocius, 2017; Erstad, 2012).

There is a vast body of literature on youth (peer) cultures (e.g. Holloway, 2014; Gallacher & Kehily, 2013; Hopkins, 2010; Furlong, 2009) and youth and schooling (e.g. Levinson, 2012; Sewell, 2000; McFarland, 2001; Hall & Jefferson, 1991; Giroux, 1983; Willis, 1978), but it is not possible to review all the pertinent studies here. Firstly, the literature reviewed in this chapter includes some key elements of these research traditions relevant to the present study, such as peer culture (section 2.2.1) and youth culture in relation to institutional worlds (sections 2.3.1.1 and 2.3.2.1.). Secondly, the focus is on presenting debates pertaining to the varied research on youth and technologies, which incorporates specific aspects associated with technology use and youth digital lives, such as mobile communication and the relationship between online and offline practices.

2.2. Mobile phones and teenagers

This section reviews the literature conceptualising teenagers' everyday use of phones and provides a starting point to understand the kind of use that is found within schools. A number of studies on phone use in school settings will be reviewed here. However, those providing evidence on negotiation processes in schools will be addressed in section 2.3., since they need extra contextual aspects to be considered.

2.2.1. Mobile phone use in teenagers' everyday lives

In the field of Mobile Communication studies, teenagers' mobile phone use in everyday life has been conceptualised as part of habits or stable patterns of life taking place outside of formal realms, such as work and education (Haddon, 2011; Thulin & Vilhelmson, 2009). Thus, the focus has been on how mobile phones are used within or affect routines, daily interactions with others in public space and domestic life, and for time organisation and coordination.

Teenagers' everyday phone use has been found to be distinctive in comparison to other age groups that some researchers have called it a Mobile Youth Culture (Vanden Abeele, 2016; Goggin, 2013; Ureta et al., 2011). This culture is characterised by commonalities in use and meaning among teenagers in different countries, such as their preference for texting over other forms of communication (Lenhart, Duggan et al., 2015) and an *always on* expectation (Mascheroni & Vincent, 2016). This can be traced back to when mobile phones appeared during the 1990s and teenagers

adopted them in unexpected ways at the time, such as text-based communication (Ito, 2005; Oksman & Turtiainen, 2004) or as a *fashion statement* (Campbell & Park 2008; Katz & Sugiyama, 2005). The distinctiveness and overall adoption of phones by teenagers around the world has been linked to socio-historical processes in industrialised and post-industrialised societies that have made teen years a distinctive life stage (Vanden Abeele, 2016; Ito, 2005). Vanden Abeele (2016) identifies three processes: industrialisation, which extended schooling and generated backlash against child labour; urbanisation and the emergence of anxieties and an increase in surveillance in connection with young people's mobilities and safety; and the emergence of markets aimed at children and teenagers.

The generational and technological distinctiveness of daily phone use persists despite the fact that teenagers now inhabit a broader ecology of personal and portable devices (Bertel & Ling, 2014). Internet access via mobile phones changed the channel and expanded the available communication repertoires (e.g. apps), but not the logic (Thulin, 2018; Mascheroni & Vincent, 2016). Texting/messaging and its importance for daily organisation, peer socialisation, communication with parents, and entertainment are still key traits (Fletcher, Benito-Gomez, & Blair, 2018; Kalogeraki & Papadaki, 2015; Ling & Bertel, 2013). For example, Lenhart, Smith, Anderson, Duggan and Perrin (2015) report, based on a representative sample of American 13-17 year-olds, that 49% of teenagers say text messaging (including messaging apps) is their first choice for communication among other options (social media, phones calls, video games) to get in touch with their peers. Moreover, 55% of teenagers spend time every day texting with friends, with 85% doing it at least occasionally. It could be argued that these percentages could be bigger if text-based communication with family members were considered, since it is also part of their daily communication. This preference relates to free texting and low prices when phone subscriptions were introduced in the mid-90s in some countries, and nowadays with prepaid systems or subscription packages that have made texting more appealing to population groups with no or low income (Ling & Baron, 2013; Ureta et al., 2011; Ling & Haddon, 2008). This is also appealing to teenagers' parents, who play a key role in their children's access to phones (Lenhart, Duggan et al., 2015).

Teenagers' everyday use of phones, particularly texting, has been motivated and embedded in *reciprocal expectations* connected with their relationship with parents and peers (Mascheroni & Vincent, 2016), which have become normative behaviours and cultural values over the years (Ling 2012). The following sub-sections review the literature on these processes, presenting evidence of their presence in school settings.

2.2.1.1. *Communication with family members – an “umbilical cord”*

The use of mobile phones to contact family members has been described as an “umbilical cord” (Castells, Fernández-Ardevol, Qiu, & Sey, 2007:147), allowing parents to gradually provide more autonomy to their children. It can also work as a rite of passage that shows trust from parents to their children (Ling & Bertel, 2013). This conditional freedom involves parents checking their children’s whereabouts while giving them more space, turning themselves into what Williams and Williams (2005) call an “absent other” (p.321) in the spaces where their children use phones. In other words, mobile phones have come to symbolize a connection with home for teenagers and their parents (Lemish, 2015).

This approach with parents is not necessarily seen negatively by teenagers themselves. Ling and Haddon’s (2008) literature review shows that some teenagers look for emancipation, while at the same time cherishing the reassurance of the parental bond. This is the case, for example, of young people with separated parents or teenagers who are away for long periods of time (e.g. holidays, summer camps); also, in Chile, this applies to children in single-and-working-mother families (Ureta et al., 2011). Moreover, the *umbilical cord* has served teenagers to negotiate certain aspects of their mobility, such as transportation options provided by parents (Döring, Hellwig & Klimsa, 2005).

The *umbilical cord* has been reported to be present in school settings (e.g. Haddon & Vincent, 2014), although there has been limited research on this issue. There is some evidence showing that parents and students in the United States and Japan admit that it is important that students take their mobile phones to school for daily communication and in case of emergency (Tulane, Vaterlaus, & Beckert, 2017; Miyaki, 2005). Tulane et al. (2017) note that, for American families, this makes sense due to previous experiences with mass violent crime. This phone-based *safety link* between parents and teenagers has also been documented in other countries for daily activities outside school (e.g. Kalogeraki & Papadaki, 2015; Barron, 2014; Ling & Haddon, 2008; Ling & Yttri, 2002).

Despite the support that students may obtain through their phone communication with their parents, it is important to consider that the relationship between parents and children it is not a balanced one. Parents have rules of their own associated with their children’s acquisition and use of mobile phones (Barron, 2014; Ureta et al., 2011; Ling, 2007). These are set by parents and not the other way around. Thus, what happens with this *umbilical cord* within the school setting becomes an interesting question since teenagers interact with other authority figures, such as teachers.

2.2.1.2. Teenagers' peer relationships in school – always on

Mobile phone use in teenagers' peer world, especially texting, has been linked to expressive purposes, such as self-presentation, networking, romance, and coordination with others (Mesch, 2013; Ito et al., 2010; Matsuda, 2005; Ling & Yttri, 2002). In Chile, a case study with four groups of teen friends aged 14-18 years old revealed the same overall purposes (Ureta et al., 2011). Underlying this phone communication and interaction among peers, researchers have proposed that there is a logic of "perpetual contact" (Katz & Aakhus, 2002:2). This refers to an expectation and reciprocal feeling of keeping the flow of messages always active (Mascheroni & Vincent, 2016; Taylor & Harper, 2003).

This *always-on* logic does not come without burden. Mascheroni and Vincent (2016), for example, found contradictory feelings among children and teenagers regarding intimacy and safety, as well as exclusion and obligation. Previous research has reported similar findings, such as feeling insecurity or anxiety for fear of missing out obligations to reciprocate, or due to not fulfilling the etiquette of expectations around phone use and texting (Bond, 2014; Hall & Baym, 2012; Ling, 2012).

Some may expect that the *always-on logic* underlying communication with peers could be working on a dialectic relation with phone communication with parents (section 2.2.1.1.). However, some evidence shows that the use of mobile phones with peers does not increase to the detriment of their contact with parents. Kalogeraki and Papadaki (2015) conclude –in a quantitative representative study with Greek teenagers aged 12-18– that there is a correlation between communication with parents and coordination and safety issues, while communication with peers has these aims as well as expressive and emotional uses. However, these authors also found that mobile phone use enhances social interactions and bonds with family and peers. Thus, for teenagers, it is not about breaking family ties to develop stronger bonds with peers.

Within school settings, studies show that teenagers are using their mobile phones to communicate with peers (Garcia, 2012; Kupiainen, 2011; Ito et al., 2008; Caronia, 2005; Taylor & Harper, 2003). Moreover, they also show that teenagers are socialising around mobile phones in co-presence in breaks and classes. This refers to an aspect researched in the early days outside school settings, namely the "social nature of texting" (Ling & Haddon, 2008:140), which means that texts are shown, shared, and sometimes created with others in co-presence, although this view could be extended nowadays to other phone-based formats. Kasesniemi and Rautiainen (2002) include diverse behaviours among such practices: collective composition of text messages; circulation of messages among closest friends or cliques; and saving certain messages (especially those considered to be funny). Lim and Ooi (2011), in a study with Singaporean teen girls, also show how, in the co-presence of friends, they share pictures among themselves to share later via Bluetooth or on Facebook. Through

this practice, the participants construct shared memories that enhance their group identities. Evidence of belonging and consolidation of social ties is also found in studies conducted in school settings. For example, in an ethnographic study with 13-16 year-olds in one Finnish school, Kupiainen (2011) found that the combination of online and offline communication with peers creates an exclusive channel for them to socialise and bond. Moreover, in England, Taylor and Harper (2003) found that phones themselves were being shared among peers –for instance, to access the Internet– as a sign of commitment, friendship, and reciprocal feelings.

Thus, teenagers’ everyday phone use involving peers and parents is indeed taking place in schools. Yet, little is known about how they manage to keep the flow of their communication and interactions in that space. Part of the explanation can be found in the fact that teenagers’ phone use has not been researched enough as a localised practice. This will be discussed in the following section.

2.2.2. Mobile phone use as a localised practice – reconfiguring social space

This study aims to inquire into the overlap of teenagers’ phone use in a space where it is not expected or desired, such as the school. More precisely, it explores how teenagers deal with that overlap and what that overlap generates for them and the setting they are in. This can be connected to the notion of mobile phone use as a *localised practice* (Taylor & Harper, 2003).

Research on the overlap between mobile phone use and the particular context where mobiles are used is scarce in the field of Mobile Communication and teenagers. Nevertheless, there are constant references and mentions to the place-based aspects of mobile phone use. For example, Eisenhart and Allaman (2018) show that texting by female teens in high school addresses various topics about school, and that such topics change depending of what takes place in a given moment. Similarly, Vanden Abeele (2016) discusses “the personalisation of public space” (p.91), referring that now young people can listen to music or engage in playful activities, such as taking pictures or videos with friends, in physical places where that was not possible before. Likewise, Barron (2014) mentions that, for some teenagers, it is important that their parents do not call them while they are with friends because it is embarrassing for them. This reasoning points to the use of mobile phones as a response or reaction to what is taking place in the physical space where teens are.

From an early stage, mobile communication researchers considered that the use of mobile phones was about bringing a more intimate aspect of people’s lives into spaces that are not used to informality (Ling & Campbell, 2009; Castells et al., 2007). For example, mobile phones were problematic in public transportation when they first appeared (Okabe & Ito, 2005) and contextual issues have been found

to hinder the *always-on* expectation in romantic mobile communication (Duran, Kelly, & Rotaru, 2011). The notion that mobile communication extends space-time realms and blurs boundaries has been a key trait of mobile communication research (e.g. Ling & Campbell, 2009; Wajcman et al., 2008). In research with teenagers, this approach can be seen in relation to the extension of the home realm or connection with parents (Lemish, 2015; Ribak, 2013; Williams & Williams, 2005) or the overlap between online and offline relationships with peers (Kupiainen, 2011). However, issues such as the ways in which teenagers manage to keep using their phones in certain places or how they adjust their use depending on contextual issues (e.g. rules, expectations, activities) have been neglected. In other words, an approach focusing on boundary crossing instead of just boundary blurring is still absent.

The lack of an in-situ and negotiated approach in studying teenagers' mobile practices is related to some limitations in the study of teenagers' everyday phone use identified by Vanden Abeele (2016). First, there has been a tendency to homogenise their digital practices with mobile phones, not fully acknowledging that youth differ across local and global contexts. Second, developmental theories have been prioritised over cultural and contextual approaches (cf. Yan, 2017). Ling (2009) claims that research on mobile phones and youth has been chiefly conducted from developmental psychology perspectives, defining teenagers mainly as an *adult to become* and therefore regarding mobile phones as a developmental tool. The perspective of young people as subjects capable of transforming the institutional and adult worlds they inhabit has been overlooked (Vanden Abeele, 2016); also, researchers have paid little attention to how young people are constrained by localised contextual cues (Mascheroni & Vincent, 2016). For example, children may be in spaces where mobile phone use is forbidden, such as family meals, or restricted due to a lack of wireless Internet, or even battery life (Haddon & Vincent, 2014; Mascheroni & Ólafsson, 2014). Other authors, critiquing the predominant view, claim that perspectives such as the social construction of childhood (Ling & Haddon, 2008), or research on contexts and space (Ribak, 2013) have been neglected.

A few studies were found to combine spatial/localised perspectives of young people being active phone users within social contexts (Kupiainen, 2011; Ito & Okabe, 2005; Taylor & Harper, 2003). Though the negotiation process is not their focus, they provide important elements about changes in space-time configurations when phone use with peers overlaps with context. Ito and Okabe (2005) and Taylor and Harper (2003) talk about *technosocial situations*. Through this concept, they emphasise how the combination of phone use and face-to-face peer relationships causes new situations or reconfigurations to emerge. For example, in both studies, the *always-on* expectation discussed earlier (section 2.2.1.2.) is seen as a product of the interactions between peers via and around mobile phones. Ito and Okabe (2005), in their study on Japanese teenagers' mobile use in public transportation, argue that this expectation can affect not only the social order of mobile practices themselves, but also that

of the place where it is occurring. For example, it causes teenagers to prioritise who needs to be addressed: co-present peers or other peers. In this regard, the authors argue that mobile phones have created new “power geometries” among teenagers (Massey, 1994:149), i.e. new ways in which different social groups are hierarchically located. Similarly, in school settings, Kupiainen (2011) finds that phone use opens an “unofficial school space” (p.7) for online and offline relationships with peers. Students’ connections with online peers make them inhabit some sort of *absent present* (Gergen, 2002), which produces tensions in classes and in offline peer relationships.

The multiple elements discussed here suggest that teenagers are not only responding to contextual cues in their use of phones, but also producing new conditions of use. In this regard, the school emerges as a relevant place to study since it is a space run by adults that has clear disciplinary rules. How teenagers negotiate these rules, as well as how they use their phones, could be reconfiguring the school space, for example in their relationship with teachers and peers. These are key questions that have not been sufficiently addressed in the field of mobile communication (Ribak, 2013). In this context, the following section presents a review of the literature on teenagers’ use of digital technologies and mobile phones within school settings.

2.3. Teenagers’ use of digital technology and mobile phones within school settings

Mobile phone use, as shown in the previous section, has become part of teenagers’ school lives in different countries. However, only in the last few years, it has become a contested issue in schools around the world. Students -children and teenagers- are using their phones continually in schools and classrooms despite school phone regulations (Ott et al., 2018; Halpern, Piña, Vásquez, et al., 2016; Selwyn & Bulfin, 2016; Mascheroni & Cuman, 2014). This brings diverse concerns and disagreements within schools about how to address this phenomenon (section 2.3.3.1.). Research on this issue is recent, and only in the last half a decade has the question about how and why young people are using their mobile phones in school been addressed more directly (e.g. Ott et al., 2018; Tulane et al., 2017).

The question how young people use and negotiate their digital practices within and across contexts has been extensively studied by an intersecting group of research on youth and technologies (e.g. Davies & Eynon, 2013; Ito et al., 2010). Within schools, this research has shown that despite schools being regulated spaces for everyday life and technology use, students work around rules and manage to bring everyday aspects to class activities (e.g. Bulfin & North, 2007). However, the focus of this research has been on curricular technology use and technology-based school projects and little is yet known about students’ use of personal devices, such as mobile phones. This is important in the current

context in which personal devices are becoming an everyday aspects of school life (Ott et al., 2018; Selwyn & Bulfin, 2016). The following subsections review this literature arguing that more research on everyday mobile phone use in school settings is needed and that it is important to consider teenagers' phone use as multi-layered and connected to educational and non-educational aspects.

2.3.1. The context-based study of young people's digital technology use

The question about how teenagers are using digital technologies in different contexts has been addressed by a multidisciplinary group of studies (e.g. Boyd, 2014; Davies & Eynon, 2013; Erstad, Gilje & Arnseth, 2013; Grant, 2011; Valentine & Holloway, 2002). Mainly conducted in Europe, North America, and the Pacific Rim, these studies see teenagers' digital practices as part of *media ecologies* (Ito et al., 2010) and embedded in various spheres of their lives, such as home and school, peer relationships, leisure, schoolwork, and family life (Livingstone & Sefton-Green, 2016). Only in recent years have studies begun to focus on mobile technologies (e.g. Vandoninck et al., 2018; Bond, 2014) or mobile Internet (e.g. Haddon & Vincent, 2015; Mascheroni & Ólafsson, 2014).

Context-based studies have paid attention to contextual factors, social lives, cultural practices, and the individual meaning of young people's technology use in the contexts they inhabit. Consistently, these studies draw on theoretical perspectives that regard young people as agents, shapers, and producers of their technology use (e.g. Livingstone & Sefton-Green, 2016; Potter, 2012; Thomas, 2011). These include childhood studies (James, 2009), new literacies studies (Lankshear & Knobel, 2011), sociocultural perspectives (Lave & Wenger, 1991), and socio-technical approaches (Bijker, Hughes, & Pinch, 1993). Likewise, there has been a preference for methodologies and methods that grant access to naturalistic online and offline practices, such as ethnography, and interviews and observations, respectively (e.g. Boyd, 2014; Erstad et al., 2013; Ito et al., 2010). In Chile, research on students' digital practices is limited and differs from these approaches. It has been dominated by quantitative studies using representative data (e.g. Adimark & Enlaces, 2013; Ibieta et al., 2013; SIMCE-TIC, 2014; Hinostroza, Labbé, Brun, & Matamala, 2011), and in some instances with poor or limited theoretical positioning (e.g. Halpern, Piña, & Vasquez, 2016; Ureta et al., 2011).

2.3.1.1. Teenagers finding their own space in adult and institutional worlds

Young people's lives taking place in different social contexts, however, are embedded and sometimes in tension with the institutional and adult worlds they inhabit (Corsaro, 2015; Livingstone & Sefton-Green, 2016; Bond, 2014; Bragg & Kehily, 2013). Thus, contexts such as home and school or relationships with parents and teachers work as boundaries to be negotiated and crossed (Boyd, 2014; Selwyn, 2011; Horst, 2010). In the case of technology use, adults' regulations relate to reasonable concerns resulting from the risks and dangers of their children's participation and engagement on Internet, like cyberbullying (Livingstone, Haddon, Görzig, & Ólafsson, 2011; Costabile & Spears, 2012).

Despite these boundaries and risks, young people are finding their own place in the interstitial spaces of institutional and adult worlds (Livingstone & Sefton-Green, 2016; Bond, 2014; Caronia, 2005). Studies show that digital technologies have a supporting role in young people's search for and accomplishment of personal spaces associated with friendship, leisure, and personal interests (e.g. Davis et al., 2017; Ito et al., 2010). For example, the online sphere (mainly social media) has become a space for young people's self-realisation and self-expression (Hughes, Morrison & Thompson, 2016; Vanden Abeele, 2016; Boyd, 2014) that streets or shopping centres, for example, once represented for friendship and leisure in teenagers' lives (Livingstone, 2009; Ito et al., 2008). This mirrors the everyday use of mobile phones discussed earlier (section 2.2.1.) in which teenagers found a private channel to communicate with peers (Kupiainen, 2011).

Studies have also shown how young people negotiate their online and everyday use of technologies within regulated physical spaces. This research has been predominantly conducted within the home setting (e.g. Furlong & Davies, 2012; Stevenson, 2011). For example, some studies show that the bedroom is a prevalent space for using digital technologies at home (Mascheroni & Ólafsson, 2014; Livingstone, 2009), although teenagers must negotiate their use with parents, for example, when it comes to the placement of computers and times of use (Horst, 2010). Some studies have been using the concept of agency to refer to this capacity of young people to act within formal contexts, such as the school, when using technologies (Davis et al., 2017; Erstad, 2016; Selwyn, 2011). Livingstone and Sefton-Green (2016) found, in a one-year ethnographic study with students from the same class in London, that digital media supported them to connect with peers and not miss out things, or to disconnect from difficult family members or critical teachers. The authors argue, therefore, that young people are not necessarily using their technologies to hide from the worlds they live in, but to choose how to act within them. However, this research can be considered an exception in terms of the study of youth digital practices within the school (Facer, 2017), as the predominant approach has been to

locate teenagers' everyday digital practices outside the school setting (Selwyn et al., 2017). This will be discussed in the following section.

2.3.1.2. School and everyday (personal) technology use: the need for a different approach

In studies within or related to the school setting, the tension between youth digital practices and institutional worlds surfaces as a dichotomy between, on the one side, the everyday use of technologies (Merchant, 2012; Bennett & Maton, 2010), interest-driven digital practices (Deng & Connelly & Lau, 2016; Ito et al., 2010), and personal technology use (Bulfin et al., 2016); and, on the other, school culture and the curricular use of technologies. School is the space for curricular technology use and a regulated space (Selwyn & Bulfin, 2016). In contrast, everyday digital practices –although they happen in the school setting– are seen as something that does not belong there, pertaining instead to young people's search for personal interests and friendship out-of-school (cf. Williams, 2014; Bond, 2014). However, recent changes in the school landscape across the world highlight the importance of redefining the school as a space for young people's everyday digital lives. Personal devices are becoming a daily and mundane aspect of school life (Selwyn et al., 2017; Bulfin et al., 2016; Merchant, 2012). Two processes in the last decade have allowed this to take place: an increase in the number of countries promoting or funding Bring Your Own Device programmes (Ott et al., 2018; Bulfin et al., 2016) and the appearance and pervasiveness of personal mobile phones in schools despite regulations (Vandoninck et al., 2018; Halpern, Piña, Vásquez et al., 2016; Mascheroni & Cuman, 2014; García, 2012). This recent situation has opened the door to unexplored ways for students to use digital technologies and for schools to respond to their students' technology use (Olofsson et al., 2017; Selwyn & Bulfin, 2016; Charles, 2012) (see more in sections 2.3.2.2. and 2.3.3.).

Moreover, mainly from sociocultural and literacy studies (e.g. Jocius, 2017; Gronn, Scott, Edwards, & Henderson, 2014; Bulfin & Koutsogiannis, 2012) (section 2.4.), researchers have been evidencing that the disconnect between everyday digital practices and school practices is not experienced as such by school-aged students on a daily basis. This is based on the role that digital technologies have in deepening concepts of mobility and fluidity in social life (Leander et al., 2010; Erstad, 2012), which include the overlap of everyday lives in physical spaces that mobile phones are supporting (section 2.2.2.). In the same vein, recent Youth Studies have shown how digital lives are points of intersection of school, peers and family lives (Livingstone & Sefton-Green, 2016). In this regard, an approach that considers school as a space for everyday life will need to incorporate the cross-boundary experiences of young people.

Studies focusing on young people's use of technology as informal learning have been prolific in exploring and developing a connected understanding of everyday digital practices and the curricular use of technologies (e.g. Deng et al., 2016; Pullen, 2015; Grant, 2011). The notion of the everyday use of digital technologies as informal learning is grounded on sociocultural theories of learning and literacies, which see it as socially situated and as an integral part of everyday interactions (Säljö, 2002; Werstch, 1998; Lave & Wenger, 1991). Thus, everyday digital practices, such as taking pictures, recording videos, social media use, especially out of school, become sources of learning and expression of young people's agency, development, and engagement (Ito et al., 2010; Sefton-Green, 2004). Among these studies, traditional schooling and pedagogies (i.e. formal learning practices) are seen as obstacles to students' agency and motivation (Drotner & Erstad, 2014; Crook, 2012). Thus, authors have sought to discuss, research, and design ways to integrate technologies and/or young people's everyday interests and experiences into the classroom and curricular programmes (Greenhow & Lewin, 2016; Kumpulainen & Sefton-Green, 2014; Ito et al., 2013; Crook, 2012).

This formal/informal learning approach has been predominant in the study of young people's technology use within and in relation to school. The following sections will mostly review studies that could be considered part of this broad paradigm that regards the technology use as learning and young people as learners. This is because, as previously noted, these studies provide evidence of students' and young people's connected experiences in their use of digital technologies within the school (section 2.3.2.), as well as theoretical redefinitions that are useful to study mobile phone use negotiations (section 2.4.). However, paradoxically, the present study takes some distance from this learning approach. This is mainly because, in defining school as a formal learning space and everyday technology use as informal learning, this approach ultimately takes the discussion and debates towards pedagogies, the curricular use of technologies, and young people as students in the school setting.

Recent debates and research on personal devices are showing that it is important to see schools as connected to broader technological phenomena and not only as sites for learning (Erstad, 2016; Merchant, 2012; Selwyn, 2011). Erstad (2016) claims that, when studying technology use in the school nowadays, the question needs to be broadened to cover engagement, agency, and participation in school activities and everyday life, considering "the mobile aspect of time and space relationships across contexts" (p.85). This includes focusing on students' digital experience at school (e.g. Bulfin et al., 2016; Chan et al., 2015), including other school spaces outside the classroom (Selwyn et al. 2017) and the relationship between students and teachers (e.g. Selwyn et al., 2017; Peck et al., 2015). These aspects become more crucial when studying mobile phone use. In order to build this argument up,

the following sections lay out the evidence available about unofficial and everyday digital practices together with a discussion of the distinctiveness of phone use within the school setting.

2.3.2. The school as a place for young people's everyday digital lives

I would claim that the study of teenagers' mobile phone use at school requires that we acknowledge not only the relation between school and formal learning, but also the relationship of both everyday and school practices taking place in the same physical space (Leander et al., 2010; Nespor, 1997). Studies exploring this relationship within the school setting show that it cannot be defined or understood as antagonistic. Students are using digital technologies, even when breaking rules, in ways that involve multiple elements, desires, and concerns. However, the appearance and pervasiveness of personal devices within schools is introducing new challenges and gaps in research that need further exploration.

Seeing the school as a space for everyday life is about getting closer to a discussion of teenagers' digital practices and lives in school and moving away from a pedagogical one on how to integrate technologies in the classroom. It is not about taking away the formality and curricular aspect of the school setting, but on seeing the everyday use of mobile phones as something linked to different elements and not in opposition with only one aspect of young people's life in school.

Evidence coming from research on students' unofficial (digital) practices in school, as well as current debates on personal devices, gives support to these claims. Young people's non-school digital practices are a response to needs related to a variety of elements present in schools. In this context, mobile phone use can be seen as a multi-layered and boundary-crossing practice (Akkerman & Bakker, 2011) between cultural domains of schooling and everyday. I examine this issue in more detail in the following sections.

2.3.2.1. Students' unofficial digital practices: breaking oppositional perspectives

A first approach to what is known about the everyday digital lives of young people in school was informed by the notion of unofficial and unsanctioned digital practices. This evidence comes from studies scattered in terms of time and interests. Some have focused on discussing how constraining the school is for students' agency or technology-based learning (Bulfin et al., 2016; Hope, 2013) and the risks that unofficial practices entail for school organisation, teachers' work, discipline, or curricular technology integration (Olofsson et al., 2017; Kay, Benzimra & Li, 2017; Tallvid, Lundin, Svensson, &

Lindström, 2015). Other authors have examined students' perceptions of technology regulations and how they adapt to them (e.g. Selwyn et al., 2017; Bulfin, 2008). Research has been almost exclusively conducted in school contexts with educational technology integration programmes (e.g. computer labs, 1:1 or BYOD programmes) or has focused on technology-based school projects.

Here, the school setting emerges as a regulated space for students' technology use. School technology regulations have included filtering/blocking content, monitoring, standardisation of devices, and restriction of certain usage types, such as gaming and listening to music (Selwyn & Bulfin, 2016). However, students are working around those rules by bringing not allowed technologies, such as phones or mp3 players (Olofsson et al., 2017; Selwyn & Bulfin, 2016), bypassing school networks and filters (Peck et al., 2015; Selwyn, 2006), gaining access to forbidden online content or games (Kay et al., 2017; Selwyn, 2006), chatting (Peck et al., 2015; Tallvid et al., 2015), downloading content (Tallvid et al., 2015; Hope, 2007), and engaging in cyber-bullying (Hope, 2007).

This tension between school regulations and students' subverting practices needs to be seen as part of a characteristic of modern schooling (Corsaro, 2015; Levinson, 2012; Wortham, 2011; Corrigan, 1979). Schools do not openly welcome popular and youth cultures (Corsaro, 2015; Kehily, 2007), including objects such as comics, handheld game consoles, or mobile phones (Tobin & Henward, 2011). School authorities and teachers work towards keeping them at bay mainly to ensure discipline. These studies also show that students find ways to work around rules and find personal space. However, students' unsanctioned practices cannot be simply regarded as rejection or resistance to school practices (cf. Henward, 2015; Weiss et al., 2008; Sterponi, 2007). For example, Livingstone and Sefton-Green (2016), in their study with one 13-14 years-old class in London, found that the school was actively looking to construct a climate of *civility* to which students reacted in varied ways, but which they generally accepted as a way "to accommodate institutional demands and yet also to articulate individual freedoms" (p.124).

Studies on unofficial digital practices have shown evidence on the same line, challenging the idea of school and digital youth practices as two opposing but interconnected sides. One way of recognising the tension between antagonistic perspectives is to define unofficial digital practices as multi-layered, hybridised, or boundary-crossing (Hope, 2007; Bulfin & North, 2007; Garrison & Bromley, 2004). Researchers have suggested that unofficial practices take elements from different domains and position students in an in-between land. For example, Bulfin and North (2007), in a study with 15-16 year-old Australian students, found that students' unofficial (digital) practices can be seen as cross-boundary experiences between home and school. The meaning of these practices cannot only be "traced and sourced" (p.247) in the context of school, but also from what students are doing with

digital technologies out-of-school. The authors mention the example of 15-year-old Mandy, who brings her iPod to listen to music, in her words, to be more focused in classes. They suggest, drawing on Bourdieu (1977) and Bakhtin (1981), that what she is doing is situating herself in-between the two tasks and managing to do both. Likewise, other studies focusing on curricular activities with technologies show that students are considering their relationship with teachers in activities proposed in the classroom (Tallvid et al., 2015; Garrison & Bromley, 2004). Garrison and Bromley (2004) found, in a 3-year case study in the US, that when students pretend to be busy in the computer lab, they find some sort of “sweet spot” between what they are doing in classes and what they want. As for teachers, they are satisfied since students are not causing trouble, and their classes look busy and productive anyway.

A second aspect challenging antagonistic perspectives with respect to unofficial digital practices has to do with their purpose. Evidence shows that students do not have a constant or even conscious desire to go against school regulations, school policies, or the school system more broadly. In studies conducted in Australia (Selwyn & Bulfin, 2016), the US (Bromley, 2004), and the UK (Hope, 2007), students report that breaking rules or using school technology in unexpected ways are in most cases responses to tedious routines and boring tasks. Other researchers have defined unofficial practices as acts of playfulness and creativity (Bulfin & Koutsogiannis, 2012; Hope, 2005), as students find entertainment as well as the chance to express their own interests and youth identities (Bulfin, 2008; Bulfin & North, 2007). In doing so, students are looking to overcome school routine and therefore making school more hospitable. Bulfin (2008) proposes to call students’ unofficial digital practices “digital underlife” (p.1), based on Goffman (1962) and Finders (1997). Digital underlife works as an attempt to reject identities offered by school and refashion or re-design others. As the name implies, the *digital underlife* does not turn into students’ main activity or identity.

This latter point, however, is debatable based on the evidence provided so far. More than rejection, students’ unofficial digital practices are about responding their own interests as both teenagers and students. More recently, Selwyn and Bulfin (2016) suggested that students are “school-savvy” (p.287): working around but not against teachers’ work and adapting their technology use to school work. Moreover, it is possible to say that the concept of *unofficial* does not show this boundary crossing and multilayeredness. For example, Olofsson et al. (2017) note that the *unofficial as misuse* emphasises students’ digital practices as totally different from school, when in their study in Sweden, the students were acting on the basis of the class activity and technology-based technologies. In the same vein, as pointed out by some researchers drawing on literacy studies (Erstad, 2014; Bjørkvall & Engblom, 2010), the *unofficial* often works as a further development of what teachers are proposing and serves the purposes of the class. In this regard, it could even be an expected outcome.

Overall, these studies have shown that non-school digital practices within the school are a response to school regulations and teachers' practices and not necessarily constitute a form of resistance. Moreover, studies suggest that students are considering their interests and identities as both young people and students in their unofficial digital practices within the school. These studies are a good starting point to understand what is taking place with students' mobile phone use. However, as shown in the following pages, the presence of mobile phones is connected to new and more complex elements that have yet to be thoroughly explored from the perspective of young people.

2.3.2.2. Personal devices, cultural domains, and mobile phones

As presented earlier (section 2.3.1.2.), personal devices are being used continually in many schools around the world. In this context, some researchers have called for an everyday perspective for researching students' digital practices within the school (Selwyn et al., 2017; Olofsson et al., 2017; Erstad, 2016; Merchant, 2012). But what is the next step in the study of everyday and unofficial digital practices after what has been done so far? The change in perspective has to do with acknowledging that youth digital lives not only come into school or appear when breaking rules: they remain in place. This claim, however, cannot be seen –yet– as a radical shift. It is more about the need for more research and different angles in a new school context than refuting what we already know about students' digital practices inside the school.

The presence of personal devices is introducing new issues to schools: tensions between institutional practice and personal ownership, especially when devices are bought privately and used during non-class time (Selwyn et al., 2017); teachers claiming that it is more difficult to enforce rules (Olofsson et al., 2017; Peck et al., 2015); devices that are not part of schools' digitalisation programmes (Peck et al., 2015); and more diverse ways for students to use their personal devices (Peck et al., 2015). Moreover, some researchers argue that eliminating unsanctioned practices in a context of personal devices can have negative effects on schoolwork and students' self-expression. For example, Tallvid et al. (2015), through a longitudinal survey-based study conducted in two Swedish schools, found that unsanctioned practices (e.g. playing games on personal laptops) are not correlated with sanctioned ones. This means that the more *distracted* students are not necessarily those who use their laptops for schoolwork less often. In other words, taking away students' laptops or implementing more regulations could jeopardise their schoolwork. Similarly, Davis et al. (2017), in a study on identities and agency in school and out-of-school contexts, discuss that limiting technology use in schools can hinder certain forms of expression and agency that are possible in other contexts. These examples lead us to reflect on the interconnection between the digital practices taking place in school and the

importance of doing research in a connected way. The everyday use of technologies in school is not a tactical struggle, but rather an interconnection of elements.

Another way to put this is in terms of cultural frames or domains that coexist within the school space. This is in line with the evidence discussed above (section 2.3.2.1.) about seeing unofficial digital practices as multi-layered (e.g. Bulfin & North, 2007). With personal devices, such practices do not just serve to give a different use to school-based technology but also introduce logics and ways of being and doing that go beyond schoolwork. In the words of Erstad (2016), drawing on Goffman (1974), technology use in school brings different *frames* into play. Youth digital lives entering the school space demonstrate the porosity of the school space and the entrance of symbolic and organising aspects of the everyday use of personal devices. In the same line, Merchant (2012), in an essay on mobile learning and everyday technology use in school, proposes that we regard schooling and mobile personal device use as different *ecologies of practice* (Schatzki, 2002), where certain meanings and doings are routinised and established. However, those *ecologies* can be changed or broken, for example, when mobile phones are used in unexpected ways in school. He gives the example of a school in South Yorkshire, England. In December 2009, this school burnt down and lost every trace of its contact list and phone directory. The school community arranged Facebook groups, Twitter feeds, and a YouTube channel to reorganise. Merchant claims that this strategy was supported not only by the creative use of media, but also by the fluidity of individuals across the *ecologies*. Some elements were transferred from the everyday day use of mobile communication to school life, but it is not easy to separate the two sides.

These interconnecting and co-existing logics become clearer and more problematic in the case of personal mobile phones. In some cases, mobiles are even more extensively used in school than other personal devices. For example, in a survey of Australian secondary education students (Bulfin et al., 2016; n=1174) conducted in three schools, over 80% of students reported bringing their mobile phones (smartphones or traditional ones) to school, outnumbering those who reported bringing laptops or tablets. In addition, mobile phones have been acknowledged as non-school related by both schools and students (Davis et al., 2017; Philip & Garcia, 2015; Chan et al., 2015; Ott, Haglind, & Lindström, 2014). However, the paradox is that schools keep promoting their use (Merchant, 2012). Mobile phones, in this regard, have been *framed* within the school as an external object, while at the same time becoming part of discourses or programmes of technology integration programs. Yet, mobile phones seem to be less easily subsumed into existing school politics, organisation, and control than other personal devices (Selwyn et al., 2017; Peck et al., 2015; Garrison & Bromley, 2004). What a couple of studies in the US (Philip & Garcia, 2015) and Malaysia (Chan et al., 2015) have shown is that students reject ways of using mobiles imposed by schools and end up using them in alternative

ways, which may or may not support academic learning. In a survey-based study with 28 Swedish students (Ott et al., 2014), 13 students reported not knowing what to do with their mobile phones in school for classes and schoolwork and not being sure they wanted to. Some students see mobile phones as private devices and think computers are better educational tools. Authors have defined mobile phones as *boundary objects* (Akkerman & Bakker, 2011) to describe this feature. The meanings and uses of mobile phones are “unstable and ill-structured in the boundaries” (Ott et al., 2014:76), such as home/school and everyday use/schoolwork.

To sum up, the debate reviewed in this section shows the need for an everyday approach that sees the interconnection of logics of beings and doings in the school setting that the use of personal devices entails (Erstad, 2016). Moreover, they show that mobile phone use is more distinctive than the use of other personal devices or even other youth culture objects (Tobin & Henward, 2011) in that it has been subsumed into logics of technology integration while being rejected as a non-school device. These elements reinforce the need to overcome oppositional perspectives and see mobile phone use as a multi-layered practice. The following section strengthens these arguments in support of the distinctiveness and multilayeredness of mobile phone use, providing evidence on the negotiation of students’ phone use in school and calling for the need to focus on students’ perspectives and actions.

2.3.3. What we know about mobile negotiation in the school setting

In this section, I present evidence of the negotiation of everyday mobile phone use. These are studies focusing on school rules, school authorities, and teachers’ and students’ perceptions and attitudes on the matter. The available evidence shows that mobile phones have been contested, but also incorporated into curricular practices, thus transforming some of the everyday relationships between teachers and students in ways not necessarily paralleled by school-based technologies. Reviewing this literature helps expand our understanding of teenagers’ phone use in schools, sheds light on its relationship with the school context, and adds some elements in the boundary crossing between the two. However, I would claim, our understanding of how teenagers are navigating mobile phone use in the school landscape is still limited.

2.3.3.1. Schools' mobile phone use regulations: improvising ways

The literature available on phone regulations is not comprehensive. From some representative quantitative studies and school case studies in a number of countries, we know that it is common for schools to define and enforce rules based on their particular circumstances (Ott et al., 2018; Gao, Yan, Wei, Liang, & Mo, 2017; Halpern, Piña, Vásquez, et al., 2016; Charles, 2012). Some schools with total bans have been described (Merchant, 2012; Lenhart et al., 2010), but partial regulations are more common. Data collected in the UK, Belgium, and China show that regulations tend to be more severe in primary education (Vandoninck et al., 2018; Khomami, 2017; Gao et al., 2014), suggesting that teenagers have more leverage in this respect. Other studies show that phones are more frequently allowed in breaks than during classes (Vincent & Haddon, 2014). Finally, the literature shows some cases of schools defining specific measures, such as asking students to leave their phones in a box before classes and/or exams (Vandoninck et al., 2018) or requesting that they bring them without a Subscriber Identity Module (SIM) card (O'Bannon, Waters, Lubke, Cady, & Rearden, 2017).

The main reasons for banning phones have to do with the distractions and disruptions that they generate (Knorr, 2018; Gao et al., 2014), together with concerns about cheating (Thomas & Muñoz, 2016), online risks for students (Ko et al., 2015; Vanden Abeele et al., 2014), and their negative impact on academic performance (Beland & Murphy, 2016). Despite these reasons, schools are also considering the other side of the coin. This includes pressure from students and their families to keep using mobile phones (Vandoninck et al., 2018) and the educational use that mobile phones can have (Black-Fuller et al., 2016; O'Bannon & Thomas, 2014). Legislation in countries such as France (Chrisafis, 2018) or Sweden (Ott et al., 2018) has been considered to be ambiguous and difficult to put into practice by teachers, parents, students, and researchers because of the diverse and sometimes contradictory elements involved (Rubin & Peltier, 2018; Ott et al., 2018). In this regard, in Chile, Halpern (2017) points out that school protocols on the matter would need to clearly establish who is responsible for what in students' misuse of phones and define which types of student phone use would be under school jurisdiction.

Despite regulations, children and teenagers are bringing their mobile phones to school and using them there (Ott et al., 2018; Halpern, Piña, Vásquez, et al., 2016). In this context of improvisation and ambiguity, the classroom becomes a key space for phone negotiation.

2.3.3.2. Teachers and students: diverse approaches and a bond of trust

Regarding teachers and students' perceptions on phone use and associated regulations, evidence is limited. Ott et al. (2018) show that, in Sweden, teachers find the issue more problematic than students, while Gao et al. (2017) show that Japanese students are supportive of phone bans during classes and exams, although not during recess. Among teachers, the available evidence suggests that there are contrasting opinions. In general, they acknowledge that students' phone use can disrupt class management and disciplinary control (Peck et al., 2015). It is possible to infer that texting is one of the most contested uses, although researchers have generated limited distinctions on phone usage types. However, teachers also believe in the importance of phone use for students' development, entertainment, and communication (Nycyk, 2011, in Vandoninck et al., 2018; Prendes-Espinosa, Castañeda-Quinero, & Gutiérrez-Portán, 2010).

Regarding strategies performed by teachers, in a study with two US high schools, Peck et al. (2015) found that teachers have three levels of strategies to deal with mobile phones. Some teachers confiscated students' phones when they were taken out or used in classes and returned them at the end of the class. Other teachers played *out of sight, out of mind* if the phone was not visible or not disruptive. And finally, other teachers asked students to turn them in at the beginning of the school day. Teachers in this study and others in Belgium (Vandoninck et al., 2018) and Chile (Halpern, Piña, & Vásquez, 2016) report that they have limited resources to fight back against students' phone use. Teachers believe that there should be clearer accountability in school phone regulation, as well as support from school authorities in enforcing phone rules.

Thus, teachers seem to be improvising ways to deal effectively with students' phone use. Studies have shown that trust between teachers and students mediates how the rules are enforced and how much leverage students have inside the classroom (Davis et al., 2017; Garcia, 2012; Cortesi et al., 2014; Charles, 2012). Tulane et al. (2017) found that, for some teachers, students who have good grades should not be penalised. As for students, they perceive that rule enforcement is based on how much teachers trust them (Davis et al., 2017). In a study in a school in Los Angeles, Garcia (2012) observed that students use their phone more in classes than during breaks. Students reported that they do so because there were more lulls in classes than during breaks. The author also claims that students use their phones more in classes where they have more mutual trust with teachers, suggesting that phone use is not necessarily a statement against academic work.

2.3.3.3. *Students' educational use of mobile phones: a "primary tool" and creativity*

Many studies on phone use in school explore its educational use in school projects or its potential for formal learning (e.g. O'Bannon & Thomas, 2014; Keengwe, Schnellert, Jonas, 2014; Cook, Pachler & Bachmair, 2011; Echeverría et al., 2011). However, there is some evidence showing what unplanned educational uses teachers and students are giving to students' phones. In this respect, phones have been mainly used as "primary tools" (O'Bannon & Thomas, 2014:20). This means that some basic features of the phones are used, such as Internet search, calculator, and dictionary, sometimes with teachers' approval (Olofsson et al., 2017; O'Bannon & Thomas, 2014).

Some research also shows that students are using their mobile phones in *creative ways* (Kupiainen, 2011), i.e. uses not promoted by teachers. For example, Olofsson et al. (2017), in a study in three schools in Sweden implementing a BYOD programme mostly with laptops, found that students were using their own mobile phones to take notes in classes or for oral presentations. Kupiainen (2011) – based on class observations in a Finnish school– shows that some students are taking photographs, recording video, and writing fan fiction for some class activities. The author claims that students themselves are creating initiatives that are related to their own interests, while still accomplishing the class task. As in the case of unofficial digital practices (section 2.3.2.1.), Olofsson et al. (2017) and Kupiainen (2011) also found that students sometimes asked for permission to listen to music while doing class work. This relates to students reporting that doing this enhances their learning in terms of motivation (Tessier, 2013, in Ott et al., 2018).

2.3.3.4. *The classroom: reconfigurations of power relationships*

There is a topic that is presented in some literature, although not discussed enough: the idea that students' and teachers' positionings are being reconfigured around phone use. Some commentators and researchers claim that the *always on* expectation (section 2.2.1.1.) is shifting power structures in the classroom (Haddon & Vincent, 2014; Garcia, 2012). This connects with what was mentioned about *reconfigurations of space* and *geometries of power* around phone use in section 2.2.2. To give a sense of what this could suggest, in a study on handheld computers in the USA, Mifsud (2005) claims that the presence of these devices affected teacher-pupil group dynamics by challenging the teacher's ability to *control* the classroom environment, thus changing the teaching and learning culture. A study with European teachers (Haddon & Vincent, 2014) shows that they see that students have been empowered by their phone use. This is because they use their phones to check information, contact their parents to solve issues that the school or themselves could do, and report bad teacher behaviour

(Haddon & Vincent, 2014). Students use the *family resource* to avoid being told off or prevent the confiscation of their mobile phones. The fact that teenagers are not respecting the established rules has been regarded as a problem affecting authority and the relation between teachers and students in Spain as well (Sánchez-Martínez & Otero, 2009).

Following the argument of two cultural domains intersecting –schooling and everyday life (section 2.3.2.2)-, the literature reviewed here suggests that schools are dealing with aspects from both sides. It is not only about considering what to do with distractions, students’ academic performance or cyberbullying. Factors regarding parents, student-teacher relationships, educational potential, and enforcement of rules are also emerging. In a context of schools around the world improvising ways to deal with phone use, little is still known about how these factors are hindering or facilitating schools’ decisions and/or students’ actions.

In the intersection of all these elements, across students’ and schools’ desires and practices, we still know little about how students are negotiating their use of phones and what kind of strategies students are implementing to continue using their mobile phones. This section has shown that students are using their phones when nobody is watching (Kupiainen, 2011) and that other times they use them as basic educational tools (O’Bannon & Thomas, 2014) or use the need to contact their parents as an excuse (Haddon & Vincent, 2014). It is possible to infer that students are being resourceful in finding ways to keep using their phones; however, studies have not sufficiently examined the intersection of elements students are dealing with from their perspectives. The idea of a bond of trust between teachers and students (section 2.3.3.2.) led me to think that different ways of relationship could result in different strategies or workarounds. Some studies on unofficial digital practices in school (section 2.3.2.1) and on mobile phones (Eisenhart & Allaman, 2018; Kupiainen, 2011; Caronia, 2005) have suggested, mobile phones are important for teenagers’ identities, as young people want to preserve their individual or collective space in school. However, how they are managing to do this and how this is connected to schools and teachers’ practices and concerns, as well as their own is an issue that needs further research. To do this, it is necessary to develop an approach that sees mobile-related negotiations in a connected way –as the interplay of two interwoven and changing sides composed of a variety agreements and tensions. Moreover, this approach will need to situate young people within their schools and focus on the ways in which they are dealing with their phone use. This includes spaces like the classroom, where most of their relationship with teachers takes place, as well as other spaces like the school yard, where phone use is less constrained, especially for teenagers.

2.4. The connected and relational study of young people's digital practices

Before finishing this chapter, I will review some research and theoretical work into young people's digital technology use conducted from what I would call a connected and relational perspective (e.g. Jocius, 2017; Burnett, 2015; Burnett, 2014; Vasbø, Silseth, & Erstad, 2013). This literature overlaps in part with context-based studies in the school setting, especially those with a learning approach. This literature has not paid exclusive attention to teenagers or mobile phone use. Despite the apparent distance from the focus of the present study, I would claim that this literature has provided empirical evidence and conceptualisations of young people's digital practices in relation to school that could serve to explore mobile phone use in this space. These studies shift from a focus on contexts to a focus on digital practices and users within and across contexts. In doing so, they deepen ideas discussed above related to the connected and multi-layered use of mobile phones, cultural domains, and space-time configurations.

These studies challenge the idea of a disconnect between contexts (e.g. home-school) in the use of digital technologies, evidencing that the disconnect is not experienced as such by school-aged students (Bjørgen & Erstad, 2015; Erstad, 2012; Crook, 2008; Erstad, Gilje, Sefton-Green & Vasbø, 2009). For example, schoolwork with digital technologies does not necessarily end once the young person walks past the school walls, just like communication with peers through mobile phones does not end when entering the school (Ott et al., 2018, Kupiainen, 2011). Connected studies see media-engaged young people actively participating within dynamic interconnections of structural and contextual conditions, online and offline relationships, meaning-making, ways of being, and technology uses and functions (e.g. Erstad, 2014; Lantz-Andersson, Vigmo, & Bowen, 2016; Burnett, 2014). This research draws on sociocultural theories of learning (Werstch, 1998; Vygotsky, 1978) and new literacy studies (Pahl & Rowsell, 2012; Mills, 2010), incorporating elements from social space theories (Leander et al., 2010; Massey, 2005; Lefebvre, 1991), practice theory (Schatzki, 2002; Holland et al., 1998), or literary/discourse theory (Lemke, 2004; Gee, 2000; Bakhtin, 1981). To study the interconnected experience, researchers have called for methodologies that trace flows of activity across settings (Leander et al., 2010) and connect online practices with the offline realm (Drotner, 2013; Leander & McKim, 2003). Researchers have given ethnography a key role as a *comprehensive* methodology to connect and trace experiences and resources (Drotner, 2013; Erstad et al., 2013).

Two conceptualisations advanced in connected studies are important for the present research. Firstly, a definition of the contexts where digital practices take place, particularly schools and classrooms, as fluid, relational, and socially constructed (Leander et al., 2010; Van Oers, 1998; Nespor, 1997; Lefebvre, 1991). Secondly, and related to the first aspect, the media-engaged young person as a

subject located within these socially constructed spaces (Arnseth & Silseth, 2013; Lemke, 2000), which results in an interplay between the individual and the context. Some studies mentioned in previous section can be considered to be going into this direction, such as those redefining digital practices as multi-voiced and boundary-crossing (Ott et al., 2014; Bulfin & Koutsogiannis, 2012; Bulfin & North, 2007) and those redefining schools as porous and open to students' everyday digital lives (Merchant, 2012; Erstad, 2016).

Regarding the first feature, school and classroom are not seen as bounded spaces but as porous and organised flows of activities that are related to schooling and non-schooling (Bjørger & Erstad, 2015; Erstad 2014; Kumpulainen, Mikkola, & Jaatinen, 2014). Spatial and symbolic references, such as figured worlds (cf. Gramer, 2018; Jocius, 2017; Brown, 2017), time-space configuration (cf. Burnett, 2015), and space of intersections (Leander et al., 2010) are used to refer to classrooms and school as relational and socially constructed spaces. For example, Erstad (2014), in a study with 13-14 Norwegian students, conceptualises the classroom as *context-making* (Van Oers, 1998), i.e. as a space that is produced and embedded in students' activities. He then employs the concept of *extended classroom* to understand how his 13-14 year-old participants were working on an online project platform and adding personal elements, for example to their online profiles or in chat rooms with other students. Kumpulainen (2016; Kumpulainen et al., 2014) and Burnett (2015, 2014) also use spatial and symbolic references to study digital practices within primary school classrooms in Finland and Britain, respectively. Kumpulainen et al. (2014) argue that different *chronotopes* or space-time configurations (Lemke, 2004; Bakhtin, 1981) come together in a writing project with personal laptops. This includes the chronotope of *traditional schooling* that is controlled and bounded, leaving little room for personalised learning and activities. Additionally, the project allowed students to create their own space-time configuration which is "ubiquitous, multimodal and multidimensional" (p.18). While working collaboratively, students were also chatting and exchanging emails, looking for information, having breaks, and listening to music. Likewise, Burnett (2015) –based on Schatzki (2002)– talks about time-spaces being "evoked" when 10-11 year-old British students play around and on screens in the classroom. To refer to such phenomena, Burnett (2014) coined the term "classroomness" –something that is produced through the official and unofficial digital practices of the study participants.

A second feature of the connected approach has to do with the media-engaged young person. This person is located within these fluid and socially constructed spaces, networking resources, and people over the course of their use of digital and mobile technologies (Leander et al., 2010). In other words, the technology user is located within the construction and shaping of space-time configurations. Researchers studying digital technologies within and across schools have shown an interest in the resources available to students and how they mobilise them, for example in leisure and school

(Bjørger & Erstad, 2015; Erstad, 2013), as well as in how they position themselves within different contexts (Holland et al., 1998; Hull & Schultz, 2002). In other words, there is research interest in learning about agency and identity (Jocius, 2017; Bjørger & Erstad, 2015; Vasbø et al., 2013; Rogers, Winters, LaMonde, & Perry, 2010). Engagement with technologies supports young people's participation in different space-time or discursive domains and enables them to find new ways of being and doing (Jocius, 2017; Bjørger & Erstad, 2015; Arnseth & Silseth, 2013). In this context, Bjørger and Erstad (2015) talk about the *connected child* in a study with 9-13 year-old Norwegian children. Authors have observed that their participants' practices become meaningful across the school and leisure domains. Authors claim that their study participants are context-aware: they see the framing and that can influence how they perceive the world and what they can do within and between school and leisure. In another study, Jocius (2017) inquires into the positional identities of two American teenagers during the production of multimodal text in a 6-week workshop. This multimodal production is regarded as a hybrid context of two "discursive domains": workshop as school and multimodal production. Both are defined as *figured worlds* (Holland et al., 1998) and both shape the students' repertoire of actions and their relationship with the final text. It is within the multimodal production itself that students will position themselves –and will be positioned by others (teachers and peers)– as good or bad multimodal composers. In this study, both subjects –Eric and Davonte– participated in both *figured worlds* in their multimodal production, although they positioned themselves differently within them. Eric was found to be a good producer within the figured world of school and a bad producer in the multimodal world, while Davonte was shown to be an example of the opposite configuration.

These studies with a connected approach, overall, have shown how –in their use of digital technologies– young people are shaping and being shaped by the social contexts they participate in. This includes a fluid and porous definition of schools and classrooms, and positioning students/young people in symbolic, cultural, and social domains that provide them with ways of being and ways of acting. This perspective makes it possible to see the school and non-school worlds as overlapping and unbounded. These features will form the basis of the conceptual framework of this study (Chapter 3). I claim that the connected approach serves to study the multilayeredness and connections of the school world and the everyday aspects of mobile phone use in school (section 2.3), while providing the localised approach missing in much of the research on mobile communication and teenagers (section 2.2.).

2.5. Chapter summary

Chapter 2 presented literature on mobile phones, digital technologies, teenagers' everyday lives, and schools. This chapter argues that the teenagers' mobile phone use is distinctive and embedded in their daily lives in different settings, reconfiguring the social spaces in which it occurs. It also argues that students' mobile phone use in schools has become an intersecting point of cultural domains of everyday and school practices in which diverse concerns and desires are at stake for schools and students. Yet, little is known about student's phone use and negotiation in school. In the current situation of personal devices coming into schools, and recent redefinitions of school space and media-engaged young people, it becomes crucial to adopt a special approach to study phone-related negotiations in the school setting: an approach that regards the school as a space for young people's everyday (digital) lives and teenagers' phone use as a multi-layered and cross-boundary practice.

Research on teenagers' mobile phone use around the world has shown that it is distinctive compared to other age groups and digital technologies since its expansion in the late 1990s. Especially, texting (also called messaging) has become a hallmark of their everyday lives, since they employ this practice to keep in contact with parents for safety and reassurance, as well as with peers for self-expression, entertainment, and friendship. These practices have become *reciprocal expectations* in the different contexts that students inhabit.

Within the school setting, this intense use does not disappear and has become an issue of international debate and concern. Mobile phone use for communication and interaction within the school setting has been regarded as a problem for students' discipline, online safety, and academic performance. However, the situation is not as simple and straightforward to sort out as other unsanctioned objects or school-based technologies. Other elements are involved such, as rule enforcement, accountability, educational use of phones, student-teacher relationships in the classroom, and students' desire to communicate with their parents and peers, suggesting that phone use is situated in an intersection of educational and non-educational domains. This multilayeredness of the elements connected to students' phone use invites us to see the school setting in a different light: as a space for young people's everyday digital practices, and not solely as space for regulation or formal learning. This should prompt more research exploring how schools and teachers are dealing with the phenomenon, but especially how students perceive and negotiate their phone use.

This chapter called for a new approach to the study of the negotiations around students' phone use, one that will allow us to see the young person in an intersection of the cultural domains of everyday phone use and schooling. Research has shown that, in unofficial digital practices within the school, students consider their interests and identities as young people and as students, interconnecting

elements from both sides. However, little is known about how students negotiate their mobile phone use and position themselves when, as previously noted, other elements linked to the educational potential of phones or parents' presence come into play. Recent studies on learning with digital devices in school, drawing on concepts, such as the social construction of space, positional identities, and mobilities, are developing a connected approach that sees media-engaged young people as active participants in the dynamic interconnections of contextual conditions within and across different domains. The present study, based on this conceptual approach, will draw on the findings outlined in this literature review to examine the negotiations around phone use in the school.

Chapter 3: Conceptual Framework

In the literature review (Chapter 2), it was argued that teenagers' mobile phone use is a contested and multi-layered digital practice within the school, where diverse educational and non-educational aspects come together. Moreover, I argued for the need for a connected and relational approach that recognises the interconnected experiences of media-engaged young people to study the negotiation of phone use in the school. In line with these claims, this chapter will present the conceptual framework used in the present study.

This study draws on the concepts of *cultural worlds* and *identities-in-practice*. Both come from the theoretical work of Holland, Lachicotte, Skinner, and Cain (1998) around identities and agency derived from sociocultural and practice theory perspectives. Additionally, the study uses the concept of *mobilities* taken from spatial conceptualisations of digital practices across settings (Leander et al., 2010). Together, these concepts situate the person using mobile phones within and across cultural worlds of schooling and everyday digital practices, where different positionalities are *offered to* actors –e.g. students, teenagers, teachers. By participating in these worlds, and in the orchestration of positionalities, the phone user finds spaces to be and to act. Thus, from this perspective, the process of negotiation can be understood as relational and boundary crossing.

This chapter is divided into four sections. The first presents my philosophical stance, which informed the generation of the conceptual framework (this Chapter), as well as the Methodology of this study (Chapter 4). Section two presents the main concepts used in this study: *cultural worlds and identities-in-practice* in relation to the theory they come from. The third section applies the concepts to define young people's use and negotiation of mobile phones in the school setting, adding the notion of *mobilities* to emphasise the cross-boundary interplay between cultural worlds, and between online and offline realms. Finally, the last section sets out the conceptual framework used in this study and its visual representation.

3.1. Philosophical underpinnings

This study explores how people (teenagers) negotiate their daily mobile phone use within an institutional setting (school). This focus on understanding people's interactions and practices embedded in a particular context is guided by a social constructionist way of defining social reality and the way we know it (Gergen, 1999; Burr, 1995). From this perspective, social life is not pre-existent

but socially and culturally constructed, while meaning is interpreted and produced in a context of social practices (Usher, 2001; Hruby, 2001).

Some elements of Social Constructionism have guided my research. Firstly, a focus on human interactions (Burr, 1995). More specifically, the notion of intersubjectivity or shared understanding (Berger & Luckman, 1966) that is produced through individuals' interactions and is a prerequisite for the construction of social meaning. Secondly, the notion that "social constructions" (Burr, 1995:3) are historical and culturally specific means that the way the world is interpreted and acted upon depends on the moment, context, and time (Young & Collin, 2004). Thirdly, the need for a "critical stance towards taken-for-granted knowledge" (Burr, 1995:2). For social constructionists, the world is not inevitable or unbiased, therefore a critical and sceptical perspective is needed to explore how certain phenomena have come to be interpreted or organised. In this process, social constructionists have paid attention to power relations and how certain meanings or accounts have become more dominant than others (Raskin, 2002; Martin & Sugarman, 1999; Burr, 1995).

Regarding the latter point, my research aligns with notions of social meaning being shaped by structuring social conditions (Dreher, 2016; Elder-Vass, 2012; Berger & Luckman, 1966). And more specifically, with social research that, while discussing the relationship between the person and the social, focuses on people's possibilities of and creativity in acting in the world within those culturally and historically grounded relationships (cf. Vandenberghe, 2002; Levinson, Foley & Holland, 1996; De Certeau, 1984; Bourdieu, 1977). Thus, this study recognises the constraints social structures and institutions—such as schooling—may exert over young people's behaviours and perceptions, while also regarding people as active interpreters and actors in the social worlds they participate in (Hruby, 2001). This leads to my understanding of young people's everyday lives as places of struggle, but also of production (De Certeau, 1984).

Regarding my role as researcher, I see myself an inseparable part of the process of understanding what young people are experiencing and doing in their daily lives at school. In a social constructionist approach, knowledge is local and dynamic (Raskin, 2002); therefore, realities and understandings are multiple (Lee, 2012). In this respect, I am interested in "knowing differently" (Usher, 2001:18) over a cumulative idea of knowledge. Within this framework, reflexivity is a key element to give voice to the participants of this study and also enables me to be immersed in a process of co-construction of knowledge with them. In the same way as Usher notes, "The point is therefore that in order to understand the meaning of an apparently simple action such as arm-raising or even more complex ones such as negotiating, it is necessary to understand how these are immersed and inseparable from a network of culturally conditioned beliefs and practices, assumptions and pre-suppositions." (Usher,

2001:20). Thus, I chose a bottom-up research design to gain access to young people's cultural worlds while being involved in them (sections 4.1. and 4.2.).

The Methodology and Research Design of this study will be presented in detail in chapter 4. In the following pages, the conceptual framework of the research will be laid out, in accordance with the philosophical stance taken here.

3.2. A sociocultural and practice theory perspective of identities and agency

The concepts *cultural worlds*, *identities-in-practice*, and *mobilities* are the basis of this study's conceptual framework. However, the first two, taken from the work of Holland and colleagues (1998), are especially relevant. Schooling and everyday phone use are defined as cultural worlds, while *identities-in-practice* serve to link the phone user and cultural worlds in producing ways of being and acting. The concept of *mobilities* (e.g. Leander et al., 2010) complements and emphasises certain aspects related to boundary crossings of cultural worlds and online-offline realms. Therefore, this section explains the overarching theory and the concepts used in this study. Aspects related to *mobilities* will be discussed in sections 3.3.2. and 3.3.3. to build the argument towards the last section where the conceptual framework as a whole is presented.

This section starts with an overview of the cultural worlds theory, followed by its theoretical foundation, and ends with a definition of the concepts used in this study and how they relate.

3.2.1. Overview of the theory

Cultural worlds and *identities-in-practice* are two concepts developed by scholars Dorothy Holland, William Lachicotte Jr., Debra Skinner, and Carole Cain as part of their theory of identity and agency (Holland, 2010; Lachicotte, 2009; Holland et al., 1998; Holland & Skinner, 1997). The theory can be defined as an anthropological, sociocultural, and social-practice theory. It can be seen, especially in their book *Identity and Agency in Cultural Worlds* (1998), as a communal project to put together and theoretically unify the authors' diverse perspectives on the person and identities as culturally and socially produced. This includes the ethnographic work by Holland and Skinner (2001) on women's narratives in Nepal; Holland and Eisenhart's research on women's academic lives in higher education (1992); Lachicotte's studies on interns' identities in mental health institutions (2002); and Cain's work on affiliation with Alcoholics Anonymous groups (1991).

These authors have situated their theoretical work within Cultural Anthropology informed by Bourdieu's theory of practice (1977), which breaks with Structuralist and Functional Structuralist perspectives (Lévi-Strauss, 1963). For Bourdieu, social practices emerge from the relation between personal experiences and the social space framing those experiences (section 3.2.2.3.). The introduction of this practice framework, as Holland (2010) suggests, produced a "shift from interest in culture as systems of meanings to interest in the use of cultural meanings in social action" (p.280). Culture went from being understood as a homogeneous, bounded, and self-significant system that "explains" social actions to culture as "unbounded, contested, and emergent" (Holland & Skinner, 1997:195). Practice theorists focus and "stay" in daily actions, such as conversations, episodes, and events because that is where cultures, thoughts, social construction, and languages take place (Holland & Skinner, 1997). The authors also situate their work within 1990s research on sociocultural human development, mainly in Anthropological and Cultural Psychology (e.g. Tudge & Putnam, 1997; Valsiner, 1993). These studies not only adopted a practice approach (the self in interaction with collective discourses and cultural models), but also explored how the individual and collective levels interact in ways that transform the cultural forms that informed them. Drawing on Vygotsky' (1978) and Bakhtin's work (1981) (sections 3.2.2.1. and 3.2.2.2.), Holland and colleagues examine how the person is produced in social practice and how that production is tied to people's possibilities to act in the world (agency) (Lachicotte, 2002; Skinner, Valsiner & Holland, 2001; Holland et al., 1998).

The theory and concepts used in this study will be defined in more detail in the following sections. Here I give an overview. Based on this theoretical and empirical project, Holland and colleagues propose a theory of identity and agency. Holland et al. argue that social life is organised by *cultural worlds* brought to life in the historical, social, and cultural interactions of individuals. Thus, these worlds are not entities in themselves, but symbolic spaces that are shaped and performed by social interaction (Holland, 2010). They serve at the same time as frameworks or orientations for interpretation and as guidelines for actions and actors (Lachicotte, 2009). In the performance of these worlds, people are socially positioned (Holland et al., 1998), for example, as novices, women, and good or bad students, and come to produce dynamic and diverse understandings of themselves and their position in the world (cf. Roth and Erstad, 2016). This self-understanding (identities³) both motivates and places limits on people's present and future actions within cultural worlds (Holland, 2010). Thus, this theory connects co-development of cultural worlds, identities, and agency (Holland & Skinner, 1997). It is in the relation between individuals that identities are produced, and in the arrangement of

³ Holland et al. use the terms *identity* and *identities* interchangeably throughout different publications. However, it is important to consider that *identities* would be more precise as it emphasises the unfinished identity project of people (Holland et al, 1998: vii).

resources (symbolic and material) available in cultural worlds that agency becomes possible (Holland, 2010; Holland et al., 1998).

I would argue that over the years the main concepts of the theory have not been subject to dramatic changes in the authors' work. After the most detailed account of the concepts (Holland et al., 1998), the available publications have described them more or less in the same terms (cf. Holland, 2010; Lachicotte, 2009; Lachicotte, 2002; Holland & Skinner, 2001). Nevertheless, Holland has been developing related ideas in other areas, such as identity work (Holland & Lachicotte, 2007; Holland & Leander, 2004), literacies (Bartlett & Holland, 2002), and historical production of the person (Holland & Lave, 2009; 2001). Core concepts and ideas have also been developed in empirical research, such as identities and schooling (Hatt, 2012; Wortham, 2008, 2006; Rubin, 2007); literacy or mathematical practices in classrooms (Hull & Greeno, 2006; Luttrell & Parker, 2001); learning lives and digital technologies (Erstad, 2014); and educational transitions (Roth & Erstad, 2016). Where relevant, some of this literature will be addressed throughout the following sections.

The present study draws on the concepts of *cultural worlds* and *identities-in-practice* to explore how teenagers are negotiating their phone use within the school. In doing so, this study pays attention to elements of Holland et al.'s theory related to agency and individuals' possibilities of transforming themselves and the worlds they inhabit. However, as this theory regards those possibilities as inextricably attached to the production of the self, it is important to understand the foundations and assumptions behind that identity-agency link and to determine how they connect to cultural worlds. The following two sections delve into this.

3.2.2. Underpinning theories in *Cultural worlds* and *identities-in-practice*

Holland and colleagues' work has been influenced by a varied set of literature but in particular by the work of Vygotsky, Bakhtin, and Bourdieu. In this section, I define the key concepts of these authors and how they have informed the cultural worlds theory. In this way, the focus is on a general comprehension of the authors' work, instead of presenting the main debates in their respective traditions. In doing so, their original work will be used, while also referencing authors who comment on these pieces.

3.2.2.1. Vygotsky – mediation and the importance of the social world

Lev Vygotsky (1896-1934) was a Russian psychologist. His work on social and developmental psychology focused on understanding human development and learning, and their origins in social interactions mediated by tools and signs (Wertsch, 1998). This became the foundation of a tradition now called the *cultural-historical* school (Van der Veer & Valsiner, 1991), which extended into areas such as activity theory (Engeström, 2001; Leont'ev, 1981) and sociocultural learning theories (e.g. Daniels, 2012; Lave & Wenger 1991).

Vygotsky (1978) states that mental processes (or “higher mental functions”) are formed firstly in social interaction in the social world. This breaks with the idea that human development and cognition are processes that are situated just in the mind or occur as part of biological maturation (Kozulin, 2002). Social interaction is characterised by the use of mediators (Wertsch, 1998; Vygotsky, 1978): socially and culturally embedded tools which mediate our human actions. It is in the interaction with mediators that meaning is transmitted to individuals, generating incorporation or change of new thoughts, behaviours, or attitudes. Thus, for Vygotsky (1981), our mental functions appear twice: first at a social level and then at an internal psychological level.

Vygotsky had a special interest in language and other semiotic tools as mediators. Mediators include mnemonic techniques, gestures, signs, diagrams, and stories (Wertsch, 1998; Vygotsky, 1981), as well as material objects and digital technologies (Säljö, 2010). Drawing on Engels (1940), Vygotsky's principle is that mediators work as tools helping to add meaning to experiences. Thus, a key element of his theory is the notion that that our contact with the world is mediated (Wertsch, 2007). Ontologically, this entails the inseparability of the individual(s) and their context (Sawyer, 2002; Engeström, 2001). As Vygotsky (1978) argued that all actions are mediated, it follows that all mediators, especially language, encode categories of the world, i.e. culture. Thus, another argument of Vygotsky is that human development is culturally and historically situated. People are born in a pre-existent community of knowledge and meaning. It is through the process of mediation in interaction that individuals acquire cultural categories that allow them to turn the world into something meaningful. Thus, through the process of internalisation generated by mediated social interactions, individuals are capable of deploying those transmitted meanings in an autonomous way.

The concept of mediation, as well as human experience of the world as mediated, are the foundation of Holland et al.'s theory (1998). These authors state that mediated practices are the basis of individuals' identity formation. Thus, identities can be understood as *higher mental functions* formed in the interaction with others and cultural tools (Holland & Lachicotte, 2007). This also entails seeing the production of identities, and the associated process of making the world meaningful, as

interconnected with the figuration of worlds in the mediation between the person and the social context (in Vygotsky –1978– associated to play in children’s development) (Holland et al., 1998). This is related to Vygotsky’s work on inner speech (1962): the result of the person organising mediated meaning, not as transcription, but more as reconstruction to become a social person (Lachicotte, 2002). The notion of “figuring worlds” forms the basis of Holland et al.’s concept of *cultural worlds*, as the horizon of interpretation of people’s interactions and practices in their theory.

3.2.2.2. Bakhtin – dialogism

Holland et al.’s theory was also informed by the work of Mikhail Bakhtin (1895-1975), a Russian philosopher and semiotician who worked on the philosophy of language and literary theory. His ideas on the novel and social discourse emphasised the historical, cultural, and social specificity of texts and practices (Robinson, 2011). Bakhtin was interested in living language, i.e. the word as spoken by real people (Skinner et al., 2001). For him, all real people produce *utterances* (he also called them just *words*), which are expressions of living contexts of exchange (Bakhtin, 1981). This means that their meaning is not found in the abstract, as words in a dictionary, but in the situation that is taking place and is produced in the encounter of the speaker with an “otherness”.

These ideas form the basis of what has been regarded as Bakhtin’s understanding of social life as *dialogism* (Holquist, 2002). Dialogism presupposes a mutually constitutive relation between the person and culture/society (Skinner et al., 2001). Our living expressions (*utterances*) are socially charged with our own voices and the voices that are part of the social language (context) in which it is occurring. Therefore, our living expressions are a *link* in a communication exchange (Bakhtin, 1986), and always exist simultaneously in answering and anticipating an answer (Hernández, 2011). “Every word is directed toward an answer and cannot escape the profound influence of the answering word that it anticipates” (Bakhtin, 1981:280). Moreover, the way we are addressed is unique and shaped by our particular place in the world (Robinson, 2011). Thus, as Bakhtin (1986), proposes, our own individual experience involves the assimilation and reworking of others’ words, language, and culture. This means that even our creative expressions are based on others’ words.

Based on Bakhtin’s dialogism, Holland et al. (1998) define identities as *utterances*. This reinforces the idea of mediation in the production of the self. From cultural resources available, individuals –such as teenagers– develop their senses of self. However, regarding identities as *utterances* also allows Holland et al. (1998) to define the production of identities or inner speech as “the space of authoring” (p.167). This relates to Bakhtin’s idea of living expression as socially charged with many voices: one’s

own and others in the social world. Identities are formed from an *orchestration* of diverse meanings-in-interaction in the world to create and deploy one of our own (Lachicotte, 2009). The latter idea of deployment introduces another feature of identities, namely that they make it possible to engage in organised action. This is because identities, as *utterances*, retain the sense of the practices in which they are formed and used (as answers that anticipate answers), including voices with different relevance and power. For example, a patient (cf. Lachicotte, 2002) is addressed by voices of her doctors, wife, therapist, and fellow patients. Her “answer” does not only consider what they are saying, but their positions in different realms of life (medicine, family, peers) and relations to the patient. Thus, her answer –as sense of self for action (Lachicotte, 2009)– cannot only be understood as one and only but addressed to several others. Finally, and connected with the second feature, Bakhtin’s ideas serve as a basis to understand the social world as a space organised around power relations, a view closely linked to Bourdieu’s work.

3.2.2.3. Bourdieu – *field, capital, and habitus*

The third theorist whose work is central to Holland et al.’s theory is Pierre Bourdieu (1930-2002). He was a French sociologist who worked on wide range of areas, such as social theory, sociology of education, and sociology of culture (Rawolle & Lingard, 2013). His work, and particularly his theory of practice (1977), was based on how social behaviour can be regulated and yet not result from the obedience of rules (Bourdieu, 1990). He proposed that practices emerge from the relational intersection of subjective experience and objective social structures that frame those experiences (Maton, 2008). Thus, practices are not just actions or behaviours, but the manifestation of the ensemble of the person and the context. Again, as in Bakhtin and Vygotsky, this suggests the idea of the irreducible person-world relation.

His theory provides three main *thinking tools* (Bourdieu & Wacquant, 1989) to explain how practices occur: field, capital, and habitus. For Bourdieu, society is constituted by fields. A *field* is a network or configuration of social relations where a competition over resources takes place (Rawolle & Lingard, 2013; Bourdieu & Wacquant, 1989). Within a field, actors occupy socially unequal positions ranging from dominance to subordination (Bourdieu, 1998), and use the relative power (positioning) at their disposal to define strategies accordingly (Bourdieu, 1986). Each field is shaped differently (e.g. economy, politics, education), having its own set of rules, history, and members. People positioning in the field is given by the *capital* that individuals possess, which can be relevant or irrelevant to that field (economic, cultural, social, and symbolic) (Bourdieu, 1986). However, individuals do not act instrumentally in fields; rather, they obey a set of embodied dispositions which Bourdieu (1990) called

habitus. Habitus needs to be seen as durable dispositions that have been inculcated and shaped by participation in the field. Bourdieu (1990) would later claim that habitus can be understood as a mixture of *structured*, referring to past and present (upbringing or current experiences), and *structuring*, in that it helps shape present and future practices (Maton, 2008). Thus, habitus should not be understood as internalised rules or laws. Habitus will lead to more or less stable thoughts and practices which, being organised towards strategies, are produced neither consciously nor intentionally (Bourdieu, 1977).

Practices for Bourdieu are the result of the relations between habitus, capital, and field. In Maton's (2008) words, this means that they are the product of relations between an individual's dispositions (habitus), her position in the field (capital), and present circumstances (field). The personal and the social space are structured, but it is through the relations of both that practices emerge.

Bourdieu's theory of practice influences Holland et al.' theory in diverse ways (also see section 3.2.1.). Firstly, as in Bakhtin and Vygotsky, human practice, as an act in the world, is regarded as the result of the interconnected relation between the person and the world. Secondly, Bourdieu defines social life as a contested bundle of relations and activity organised by power relationships, an idea that forms the basis of Holland et al.'s notion of *cultural worlds*. People's positioning in them (*capital*) will orient actions and decisions. Bourdieu's concept of field brings a view of social life as power-based that is more structured than that presented in Vygotsky and Bakhtin. Thirdly, Bourdieu's concept of habitus makes it possible to define *identities* as social experience being internalised and embodied as people enter and participate in fields of social practice (Lachicotte, 2009), while organising and guiding present and future practice. This aligns with Bakhtin's idea that, in authoring the self and the world, actors retain positionings and social and cultural meaning in practice.

Combining these authors gives substance to a theory of identities and agency that sees identities as produced in and a condition for social practice. This distinguishes this theory from other theories of identity that see the person acting in the world (e.g. Goffman, 1959) as something controlled by the subject and not as a relation between the person and the world. Moreover, Holland et al. (1998) emphasise the key role of (semiotic) mediation in the possibilities of transforming identities and therefore people's experience in the world. This point is illustrated by the limitation Bartlett and Holland (2002) see in Bourdieu's work in this regard. They claim Bourdieu failed to see that cultural forms (mediators) play a key role in the transformation of the *habitus*. In their opinion, Bourdieu's work advances a more structured view with limited possibilities for individuals to *improvise* (Holland et al., 1998). Thus, in drawing on Vygotsky and Bakhtin, Holland et al. (1998) do not seek to highlight

how people's behaviour is "regulated", but how people manage to make sense of the world and become an acting-self in it, and sometimes even transforming it over time.

3.2.3. Identities-in-practice, cultural worlds, and positional identities

As shown so far, the core of Holland et al.'s theory is the person in relation to the world. One of the main questions that this theory can answer is how identities are produced within cultural worlds, and how individuals become members of them (cf. Holland, 2010; Cain, 1991). However, this theory also allows asking about what can be done within cultural worlds. The latter aspect is important for the present study since it makes it possible to explore how teenagers are negotiating their phone use in the school space. This section presents the key theoretical elements this study derives from Holland et al.'s theory.

3.2.3.1. Agency as improvisation and authoring the world

It has already been noted that Holland et al. (1998) define identities –self-understanding and possibilities of action– as produced through and within everyday activities. Identities are an ongoing production of human practice. They are neither given things nor assigned endpoints. In the process of identity production, "individuals also come to understand their ability to craft their future participation, or agency" (Urrieta, 2007:120). Therefore, the task of being and producing the self is simultaneously the task of acting in the world. In this regard, Lachicotte (2009) defines identities as "senses of self-as-actor" (p.224). In this study, teenagers' mobile phone use is seen as a social practice, and therefore as part of an identity process of being a student and a young person finding out what she is able to do in the school space.

That agentic capacity of individuals is what Holland et al. (1998) call *improvisation*. Improvisation is the key practice whereby individuals distance themselves from what they have been given to produce their identities and shape their contexts. Improvisation, and therefore agency, do not have a constructivist approach in this theory. In other words, improvisation and agency are not about the actor constructing his own world given certain structures and position in the broader context. Improvisation is not structurally defined by the context, nor does the actor produce his own world. Improvisation, drawing on Bourdieu (1977), is the result of present circumstances and a sense of self that is oriented towards action. "Improvisations are the sort of impromptu actions that occur when our past, brought to the present as habitus, meets with a particular combination of circumstances and conditions for which we have no set response. Such improvisations are the openings by which change

comes about from generation to generation.” (Holland et al., 1998: 17-18). Agency as improvisation highlights the unpredictability of people’s actions. This is an important idea for studying phone use in school, since this practice has been unexpected and contested in that space.

While improvising, as agency and identity-in-practice, there occurs an *orchestration* of resources: improvisation is grounded in individuals’ ability to orchestrate various resources (symbolic and material) coming from the cultural worlds they participate in (see following section). As a result of orchestration, individuals are able to author their selves and eventually those worlds (Lachicotte, 2009; Holland et al., 1998). In other words, in Holland and colleagues’ theory, individuals’ capacity to act in the world is an action of authoring. As previously noted (section 3.2.2.2.), this idea of authoring draws on Bakhtin’s (1981) *dialogism*. People do not live in a vacuum, but in worlds that have been shaped by others before us. Individuals can respond through a variety of pre-existing voices and resources. That response, in Bakhtin’s terms, always entails authoring and its underlying process is orchestration. In Holland et al.’s theory, voices and resources in the social world come from and are organised in cultural worlds.

3.2.3.2. *Cultural worlds, positionings, and positional identities*

Cultural worlds (also called *figured worlds*), as mentioned earlier (section 3.2.1.), are symbolic and socially-constructed spaces where the orchestration process occurs, i.e. where individuals arrange cultural resources to author the self and to improvise. In cultural worlds, individuals are also positioned (Holland, 2010). To understand the latter aspect, it is necessary to describe the cultural worlds concept in more detail.

The (re)production of *cultural worlds* is a local and sociohistorical process (Holland, 2010). Thus, they are not only (re)reproduced in practices that are the result of individuals interacting with local and present contextual circumstances, but also of *sociohistorical* practices (Holland, 2010; cf. Wortham, 2006). This refers to practices taking place over time in which cultural and social meaning become institutionalised, represented in artifacts (material or symbolic) that transcend the local and affect many actors across time and space. This does not mean that cultural worlds become a compact thing. The idea is that, although they can stabilise, they keep being dynamic bundles of practices and meaning as long as somebody (*some bodies*) are engaging and participating in them. It is possible to connect this stabilisation and organisation of practices to the production of individual and collective senses of self (Holland et al., 1998). Collective identities refer to sense-as-actor, which is shared by members of same cultural worlds. Examples of cultural worlds include courtly love in the 11th and

12th centuries (Holland et al., 1998), the discipline of psychiatry (Lachicotte, 2002), the world of academic achievement (Caraballo, 2012), and, as in this study, schools and classrooms (Rainio, 2008; Robinson, 2007; Luttrell & Parker, 2001).

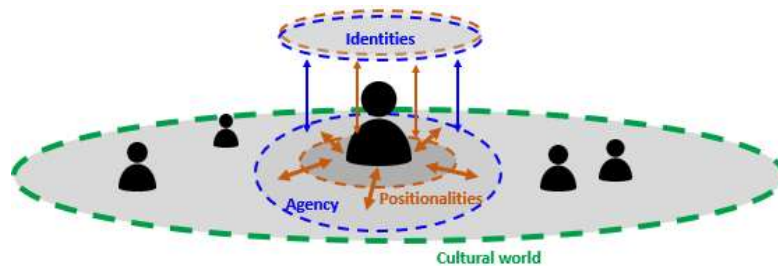
An important feature of cultural worlds is that they provide a horizon of interpretation and performance of actions (Holland et al., 1998). Lachicotte (2009) proposes to see cultural worlds as a play with a sketchy script, with roles assigned, where the performance is more or less improvised. That play becomes a framework of elements that participants (actors) can expect: “who the actors may be, what kinds of events and interactions may happen among them, where such events may occur, and how these interactions may unfold, towards what conclusion” (p.227). It is in interaction with other people, from their knowledge and responses to our own responses, that we learn how to move in them. This connects with another feature of cultural worlds (and therefore, of production of a *sense-as-actor*), namely their relational aspect (Bartlett & Holland, 2002). In other words, cultural worlds are not only conceived or figured in terms of their *generic and expected* storylines and characters, but also “peopled” (Lachicotte, 2009:228). Learning how to move in *cultural worlds* is neither a straightforward process nor one that necessarily is the result of free choice. As in Bourdieu’s fields, people within and across cultural worlds are positioned by themselves (e.g. oriented by desires and expectations) and others (e.g. by others’ desires and expectations). Moreover, as emphasised by Bakhtin and Bourdieu, there are structuring positions (subject-positions) across cultural worlds in terms of status, resources, and activities that make it difficult, if not impossible, for some people to accomplish their desires and expectations. Examples of subject-positions include woman, man, rich, poor, good student, good friend, etc. This relates to the idea presented in section 3.2.2 about identities retaining the meaning and, in this case positionings in practice (Lachicotte, 2009).

However, it is important to mention that those positionings, as relative positions with others or structuring subject-positions, can be rejected, taken, or reworked by individuals (Hatt, 2012; Holland & Leander, 2004; Holland & Skinner, 1997). Thus, they are not equivalent to what Holland et al. (1998) call *positional identities*. *Positional identities* refer to that orchestration of resources to produce a *sense-as-actor* described above (section 3.2.3.1.); however, only analytically, here they are linked to the positionings and emphasise even more the co-development of self-understanding, agency, and cultural worlds in this theory. Simply put, within cultural worlds, people need to develop not only a sense of self, but also an understanding of their position within cultural worlds, which is not only conceived but performed (Lachicotte, 2009; Bartlett & Holland, 2002). For example, within the world of schooling, teenagers can be *offered* a positioning as “good student”, however, they can respond to it in diverse ways, and act accordingly in diverse ways as well, orchestrating the diverse resources available, such as explicit and implicit rules, improvised meanings, or practices. It is important to

mention that this theory provides no grounds to overlook common-sense actions, unconscious behaviours, or even individuals not explicitly wanting to engage with positionings offered within cultural worlds (Lachicotte, 2009). This means that people can act irreflexively, as well as superficially.

Figure 3.1. summarises the key elements of Holland et al.'s theory as a basis for the following sections. In this theory, agency, identity, and context are inextricably interconnected within practices of everyday life. Acting in cultural worlds is necessarily attached to producing a self-understanding in relation to others in those worlds (identities). Figure 3 represents this interconnection, showing the individual in practice and interaction, participating in and (re)creating worlds in the centre.

Figure 3.1.: Main concepts of Holland and colleagues' cultural worlds theory

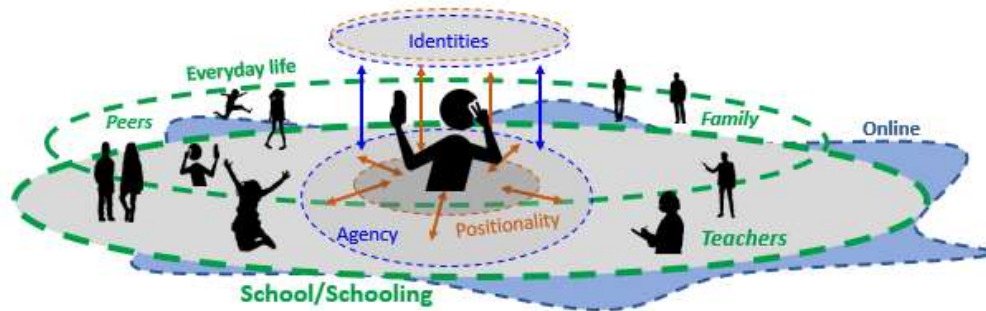


For this study, the decision to draw on the side of this theory related to agency (individuals acting in the world) results from my main objective, namely to understand how a social practice –the use of mobile phones– takes place within a particular context –the school setting– where those practices are seen as problematic and may well be becoming an actual issue. My main interest is not to understand how (*positional*) *identities* are produced, but to use this concept to access the relations and improvisations that teenagers are performing in their everyday use of phones in school.

3.3. Teenagers' phone use within and across cultural worlds

This section presents the application of the theoretical framework presented above (figure 3.1.) to the focus of this study: students' negotiation of mobile phone use within the school setting. Figure 3.2. maintains the original scheme but adds into the equation the cultural intersecting in the phone use in space of school, as well as adding the sense of mobilities across different worlds and the online-offline connection. These elements draw on the literature review, for example teenagers' phone use in school (sections 2.2.1. and 2.3.3.) and notions about the connected experience of using technologies (sections 2.3.2 and 2.4.).

Figure 3.2: Teenagers' phone use in the school - applying concepts of positional identities, cultural worlds and mobilities



This framework defines teenagers' phone use as a social practice taking place in the interplay of cultural worlds of schooling and everyday life. It is assumed that teenagers are producing their self-understandings as students and young people using the material and symbolic resources available in those cultural worlds, including the positions *offered* to them, again, as students and young people. Teenagers will find ways to act, in this case, to negotiate their phone use in accordance to the background that provides the cultural worlds as well as their own sense of self. Thus, this study focuses on the agency and possibilities of improvising ways (section 3.2.3.) to use mobile phones as an interconnection and boundary crossing of the phone user within and across cultural worlds of schooling and everyday phone use. In this way, the negotiation of phone use becomes the unit of analysis of intersecting practices, and therefore, a multi-layered orchestration.

3.3.1. The cultural world of school

In this study, school culture is defined as a cultural world (section 3.2.3.2.). Certain behaviours, meanings, and interactions become desires or expectations (Holland et al., 1998) that also can be applied to teenagers' phone use in school, for example, to keep it at bay during classes. Defining the school as a cultural world distinguishes the concrete space of school (i.e. building) from the larger cultural world, with the latter being regarded as a socially constructed and symbolic space of activity and practice (Holland 2010; Lefebvre, 1991). In this regard, the cultural world of school can be understood as well as the world of schooling.

In a broad sense, the world of schooling has been shaped and reshaped by people's relevant practices within it and through history (Hatt, 2012). In different parts of the world, schooling is arranged in a particular time-space configuration (Lemke, 2004), around classes and breaks. However, classes and the classroom become the emblematic spaces of the world of schooling (Rubin, 2007), where activities

are organised around a curriculum and teachers and students are the key actors (Lachicotte, 2009). In other words, the world of school is the space for formal learning (Sefton-Green, 2004). Jocius (2017) adds that its main goal is the completion of assignments and the achievement of good grades, as well as the prioritisation of written text and standardised tests over other formats and assessment types. This characterisation of schooling has also been applied to describe the Chilean educational system and the experiences of key actors (e.g. students and teachers) in it (cf. Bellei & Morawietz, 2016; Cavieres, 2011; Poblete, 2008).

In its (re)production, the world of schooling (nondeterministically) produces a certain kind of student (Link, Gallo, & Wortham, 2017; Wortham, 2006; Levinson et al., 1996). After all, school is a disciplinary and regulatory space (Link et al., 2017). In the performance of the world of school, distinctions are made between good and bad students, depending on grades, social backgrounds, and interests (Rubin, 2007; Luttrell & Parker, 2001), and students are expected to be capable of self-regulation (Link et al., 2017). In relation to their teachers, students are expected to comply with their rules, which reflects the power imbalance between them, and teachers are expected to conform with a role of authority. For example, in their study on American teenagers' literacy, Luttrell and Parker (2001) establish that the labels of 'good' and 'bad' students become *cultural worlds* ranked differently in the school setting. Students positioned in one or the other do not expect to be treated in the same way by teachers or peers. These findings show two issues. Firstly, that, as other studies indicate (e.g. Wortham, 2006), classrooms can integrate different cultural worlds. Secondly, that students are part of the world of school and, as Holland et al.'s (1998) theory suggest, having a self-understanding of their positioning in it can result in different ways of acting.

Regarding the phone in school, it is possible to suggest that the *desired identity* (Holland et al., 1998) would be one of a *good student* who does not use mobile phones; and if he/she does, it will only be where and when it is permitted. This is in line with the problematic connotation that students' mobile phone use has acquired in different parts of the world (cf. section 2.3.3.1.). This is also connected with a historical tension between the school world and youth culture and mediational practices –or between formal and informal learning (cf. section 2.3.2.1.), even though nowadays there is a better understanding of their connection with youth culture and informal learning (cf. section 2.3.1.). However, as shown in the literature review, diverse elements (cultural resources), for example regarding education, regulation, and youth culture, are available and little is known about how they are being considered by schools and students themselves.

3.3.2. The everyday use of mobile phones in school: the connection and crossing of worlds

On a theoretical level, the personal and everyday use of mobile phones in the school world becomes what Holland et al. (1998) would call a “counter world” (p.250). On a symbolic level, a *counter world* serves to limit action, to warn individuals that certain actions could lead to undesirable outcomes within a cultural world. For example, being on the phone can be interpreted as not participating in the school world, and therefore could lead to bad grades or failing a subject.

However, a counter world could be interpreted as a cultural world in itself. The lack of engagement in school practices when using mobile phones suggests that students participate in other kinds of activities that are related to other cultural world(s). As shown in the literature review, personal digital devices are part of the school landscape. The unexpected or unsanctioned practices (section 2.3.2.) for the school world became associated with already existing ones related to entertainment, leisure, and relationships with peers. Moreover, the family bond through the mobile phone also takes place in schools (section 2.2.1.) As Holland et al. (1998) suggest, engagement in these socially-produced and culturally-organised non-school practices makes it possible to define them as a cultural world as well, in which non-schooled positionings are offered, such as friends (cf. Roth & Erstad, 2016; section 2.4). In this regard, everyday mobile phone use is defined as an intersecting point of cultural meanings and practices of students’ everyday lives.

Accordingly, participation in different school and non-school practices will not be seen as separated but interconnected. To conceptualise the connection of school and non-school practices (and therefore of cultural worlds) within the school, I draw on spatial conceptualisations of educational and learning spaces (e.g. Leander et al., 2010). As reviewed in chapter 2 (section 2.4.), some studies on young people’s use of digital technologies in school have redefined educational spaces –classroom and/or schools– as lived spaces (Lefebvre, 1991). This means seeing the school as a space that is continually under production by the interactions and practices of its members and structural forces that may extend beyond its physical walls (cf. Massey, 2005). It also means seeing the space of school as porous (Nespor, 1997), in connection to the community and students’ culture. Thus, it is possible to state that the school space is not only inhabited and produced by curricular practices or identities as students. The school space is understood in this study as an “intersection” (Leander et al., 2010: 336) of practices and cultural worlds (Holland et al., 1998).

Understanding the school space as *intersection* also entails seeing teenagers’/students’ mobile phone-related practices and experiences as *mobilities* (Leander et al., 2010). In other words, in the use of mobile phones, teenagers are crossing overlapping worlds (Bjørgen & Erstad, 2015; Akkerman & Bakker, 2011; Ling & Campbell, 2009). In this study, the use of personal mobile phones will be regarded

as a practice that (re)produces different –and sometimes opposing– cultural worlds which are also intrinsically connected to it. Mobile phone use, as shown in chapter 2 (section 2.2.1.), is intensively related to reciprocal expectations of (online) communication and interaction with peers and family members. At the same time –in a group of phone owners– interactions inside the school setting among peers or teachers are expected to be extensively mediated by mobile phones, with or without Internet access. Finally, teachers and other school practitioners may be establishing different kinds of interactions around the use of mobile phones given their perceived disciplinary and academic impact (section 2.3.). None of these practices, despite existing in the school setting, are completely situated in one cultural world, as the individuals (teenagers) can freely move across them. For example, this is what has been shown regarding unexpected practices in the school setting (section 2.3.2.2.), in which students' (digital) practices and experiences can be considered a combined response to expectations or needs coming from the worlds of school and everyday life (e.g. Bulfin & North, 2007).

Regarding this idea that teenagers are crossing cultural worlds' boundaries in their use of phones, there is another element that is brought up by the concept of mobility: the connection of the online and offline realms (Leander & McKim, 2003). As presented so far, the connections and interconnections of practices and worlds take place from a symbolic and located perspective, but some of these are possible because of Internet access or mobile phone call plans. Drawing on Leander and McKim (2003) and Miller and Slater (2000), this study will define the online realm (and mobile phone communication) as something that is not separated from the offline realm. This idea is also based on relational conceptualisation of space (e.g. Lefebvre, 1991; Soja, 1996; Massey, 2005). As Miller and Slater (2000) state in their ethnography on Internet use in Trinidad and Tobago, "...we need to treat the Internet media as continuous with and embedded in other social spaces, that they happen within mundane social structures and relations that they may transform but that they cannot escape into a self-enclosed cyberian apartness" (p.5). This means that online and offline are not defined in this study as cultural worlds, but as social spaces where the different cultural worlds can take place and social practices can be situated. Thus, what takes place online –for example, teenagers communicating with peers or family members outside school– do not necessarily have less influence on identity production, positionalities, and therefore agency than offline mobile phone practices; for example, students looking up a word in class because the teacher allowed it, or students listening to music from their mobile phones on a break.

3.3.3. Negotiation, orchestration, and authoring in the use of mobile phones

In the context described, teenagers' orchestration of cultural resources in their use of phones becomes a key question. This study inquires into how teenagers manage to use their phones with different people and with different purposes within the school. From the theoretical perspective adopted here, in the interconnected experience teenagers have when using mobile phones in school, they are crafting their future actions and interactions within and across cultural worlds. Even though diverse resources available in cultural worlds can serve as guides for actions, they do not determine them (Holland et al., 1998). Paraphrasing Luttrell and Parker (2001:236), the focus is not on assuming that teenagers are not following the school rules, but on investigating why and how they use their phones the way they do in the school, classroom and on an individual level.

Thus, the negotiation of phone use in school is defined as an orchestration of cultural resources within and across the cultural worlds of schooling and everyday life. That negotiation is an improvisation in the sense that Holland et al. (1998) define it, as what enables individuals to distance themselves from what they have been given to produce their identities, act in the world, and shape their contexts. Drawing on the concept of *mobilities* (Leander et al., 2010, 2010; Leander & McKim, 2003), negotiation is also understood as cross-boundary. Therefore, researchers' attention focuses on what resources are available to students, for example in leisure and schooling, and how they mobilise them to be and to act around their use of phones in school (cf. Roth & Erstad, 2016).

Some cultural resources are related to the stabilisation of cultural worlds (section 3.2.3.2.), e.g. formal regulations in school or explicit agreements between friends. However, it is not possible to know in advance what cultural resources are at stake in practice. I would argue that an analytical way to do this is to focus on the relational aspect of cultural worlds and the production of the *sense-as-actor* (section 3.2.3.2.). This refers overall to considering cultural worlds as populated by others (Lachicotte, 2009) who are positioned in diverse ways (Holland et al., 1998), for example, as certain kinds of friends, students, teachers, or family members. Those positionings provide a meaning based on which individuals address others and understand their own ways of being and acting (Holland & Leander, 2004). This situation reminds us that mobile phone use takes place not only in the background of interpretation but in a specific time and space, where people are positioned and position themselves in diverse ways (Holland & Leander, 2004). This study focuses on teenagers using their phones in school, but it is important not to forget that this is a multiple-sided relation with others and from others, including relationships between teenagers, teenagers with adults (teachers and school authorities), and between adults in the (re)production of cultural worlds.

The negotiation of phone use, although connected to these devices, is not the same as using them: the negotiation process entails introducing that contested overlap between cultural worlds that position teenagers as students and young people differently. It also entails a negotiation of the meaning of phones in various cultural worlds (Holland et al., 1998), for example, as educational tools in the school world, as tools for leisure in the world of peers, or any other meaning that may emerge in the context of this study. This is especially important in the case of phone use in school, since it is a practice that has certainly failed to be organised or controlled by official rules or expectations coming from school practitioners and students themselves (e.g. Chan et al., 2015; Ott et al., 2014). In this context, the cultural worlds presented provide a “realm of interpretation” (Holland et al., 1998:52) without prescribing a specific kind of negotiation.

Finally, the orchestration of resources, as Holland et al.’s theory suggests (section 3.2.3.1) can also be understood as a space of authoring for the self, and with the potential of transforming the cultural worlds where individuals participate (Lachicotte, 2009). This is an important element to consider in terms of the possible implications of teenagers’ negotiation on themselves and other actors participating in relevant cultural worlds, such as teachers or parents. The literature review (sections 2.2.2 and 2.3.3.) revealed that mobile phones use can generate changes in time-space configurations, redefining roles or reciprocal expectations around phone use, for example within the classroom. These elements have already been shown to have some possible effects on phone-related negotiations that need to be explored in more detail.

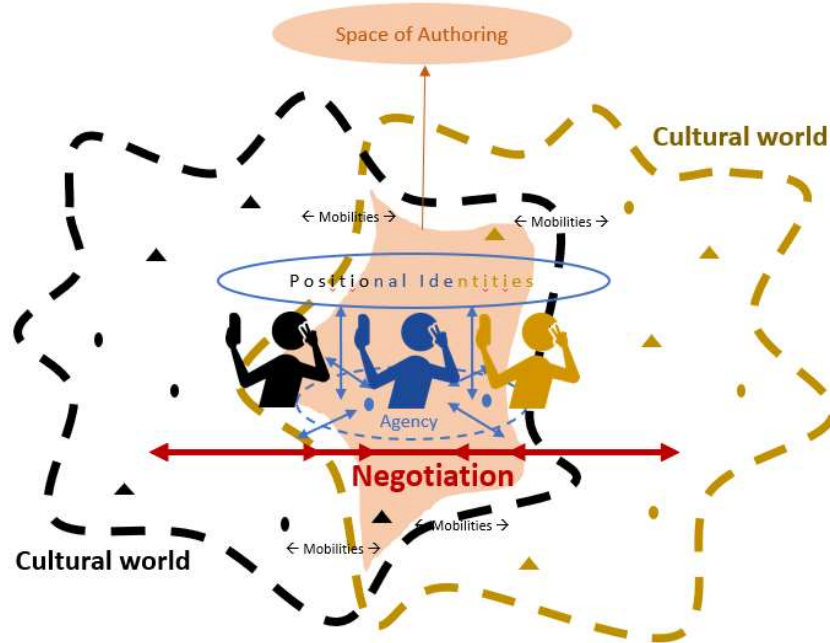
The following section summarises the main concepts used in this study and their relationship in a figure (figure 3.3.) that represents how the negotiation of phone use is conceptualised.

3.4. A conceptual framework to examine students’ mobile phone negotiation in the school setting

In this study, the negotiation of teenagers’ phone use is defined as an orchestration of resources coming from the overlapping cultural worlds of school and everyday life (figure 3.3.). In this regard, Figure 3.3. can be understood as representing orchestration in teenagers’ phone use. Drawing on concepts of *identities in practices* and *mobilities*, it is seen as a relational and boundary-crossing process. While teenagers come to understand their positionings (*positional identities*) in the overlapping cultural worlds, they will be able to improvise ways of being and acting (*agency*), mobilising available resources coming, for example, from explicit and implicit rules, relationships with adults and other students in- and out-of-school (*negotiation*). That irreducible relationship between

individuals and cultural resources entails the generation of a space of authoring to (re)produce ways of being and acting in the negotiation of phone use in school.

Figure 3.3.: Conceptual framework of the negotiation of young people's phone use within the school



The emphasis on the concept of *positional identities* in the figure over *identities in practice* is related to situating the person within and across cultural worlds in a clearer fashion. As Holland and Leander (2004) state, subject-positions can work as a point of access to understand how individuals, such as teenagers, orchestrate resources and position themselves in relation to others. This focus does not aim to disregard the inescapable production of the internal self (Urrieta, 2007), also oriented to action as *habitus* or *inner speech*, but to highlight the *answer* in the world, *agency*, and *outer speech* (Holland et al., 1998).

The research questions of the study relate to different points of view that the conceptual framework provides. In this study, the unit of observation is mobile phone use in school, and drawing on Holland et al. (1998), this entails that the phone user becomes another possible unit of observation. In both cases, the practice and the individual are connected producing and participating in the intersecting cultural worlds of schooling and everyday phone use. The first research question **“What elements in the school world are constraining or enabling teenagers’ mobile phone use?”**, focuses on understanding the background of interpretation and guidance of action where phone use takes place, i.e. the aforementioned intersecting cultural worlds. That intersecting space makes it possible to see which cultural resources are available or unavailable for teenagers’ mobile phone use. The second research question, **“How are teenagers negotiating their use of mobile phones in classes with**

teachers?” focuses directly on teenagers’ phone use in probably the most emblematic space within the school: the classroom. The negotiation of phone use is seen as an orchestration of cultural resources related to the intersecting worlds of schooling and everyday life, in this question, in the classroom and with a focus on the relation between teachers and students. Finally, the third research question, **“How are teenagers orchestrating different positionalities in their use of mobile phones in school?”** focuses on phone users, as individuals orchestrating ways of being and acting, as students and young people, in their use of phones within the school space across different settings (e.g. classroom, school yard) and online and offline realms.

3.5 Chapter Summary

In this chapter, the conceptual approach of the study was presented. The overarching theory (Holland et al., 1998) is a sociocultural and practice theory perspective of agency and identities, where both processes are defined as happening in social practice. This is a theory about the impossibility of separating what people do, who they are, and the symbolic and relational worlds in which both take place, as something interconnected and in constant movement. This perspective makes it possible to see teenagers using a mobile phone (offline and online) as agents in connection with their environment, answering to diverse positionings and related desires in the cultural worlds they participate in, such as schooling and their everyday lives. The conceptual framework also includes socially constructed definitions of space and young people’s digital practices (Leander et al., 2010; Leander & McKim, 2003). The school space is seen as layered space. As a result, teenagers’ digital practices with their phone are defined as boundary crossing between cultural worlds and the school space as porous to practices coming from different cultural worlds.

Mainly drawing on the concepts of *cultural worlds* and *positional identities* advanced by Holland and colleagues (Holland, 2010; Lachicotte, 2009; Holland et al., 1998), along with the concept of *mobilities* (Leander et al., 2010), this study defines teenagers’ negotiation of their phone use as a relational and cross-boundary orchestration of cultural resources in the intersection of the cultural worlds of school and everyday life. Both worlds are constantly (re)produced in the practices and interactions of their members; they become both interpretative backgrounds and *providers* of diverse positionings for young people and adults such as teachers, students, friends, and parents. However, these cultural worlds do not determine how individuals will respond in a specific context or address others. Teenagers’ negotiation of their phone use in the school space will be based on individual and collective ways of arranging various cultural resources (e.g. meaning, practices, rules) within and across cultural worlds. Cultural resources are associated to their positionings in them, but how they orchestrate them

will depend on circumstances and their self-understanding of those positionings (*positional identities*). Phone use negotiation in this study, therefore, is not regarded as “successful phone use” but as multiple ways of being and acting around teenagers’ (online and offline) phone use in their schools and classrooms with friends, teachers, and parents.

Chapter 4: Methodology

This chapter presents the Methodology of the study. The chapter is divided into six sections. The first lays out the methodological approach used. The second presents an overview of the Research Design and research questions. The third section describes key stages before data collection: Pilot Study and access and selection of participants in the Main Study. The following two sections present the data collection and analysis procedures. The last section delves into the ethical issues of the study, such as informed consents and researcher positionality, while addressing how contingencies were sorted out during fieldwork.

4.1. Methodological approach

Since people's cultural practices and meaning cannot be reduced or predicted (section 3.1.), it was necessary to adopt a methodological approach that granted access to socially constructed interpretations and practices (Gonzalez, 2000). This research looked for ways to engage with and participate in young people's everyday lives and digital practices in school. Thus, this study drew on ethnography for its design (Creswell, 2013; Walford, 2008; Leander & McKim, 2003). Moreover, it incorporated ethical and methodological considerations based on research with children and young people to assure participation as well as protection of the subjects (Pascoe, 2012; Greene & Hogan, 2005; Emond, 2005). This section focuses primarily on the ethnographic approach used in this study along with some specific considerations for examining students' digital practices. Further details of the ethical processes and challenges of working with under-aged participants will be discussed in section 4.6.

4.1.1. Ethnography

Ethnography, as a methodological approach, has experienced a diversification (Hammersley, 2018; Walford, 2008) since its birth in the 1920s-30s in the fields of Anthropology and the Chicago School of Sociology (e.g. Manilowski, 1922; Mead, 1930). However, authors such as Waldorf (2008) and Hammersley (2018), identify some features that need to be present to define a study as ethnographic (below). These explain why ethnography is appropriate for the study of young people's practices within the school setting.

Ethnographic methodology provides a way to explore and understand "patterned ways of perceiving, believing, acting and evaluating what members of social groups develop within and across the events

of everyday life” (Green, Skukauskaite, & Baker, 2012:310). This includes a focus on “individual lives and social structures” (Waldorf, 2008:7) and getting access to the meaning participants give to their lives and themselves in naturally occurring settings (Hammersley, 2018). In doing so, the researcher gets involved in the participants’ cultural worlds, spending time with them and collecting first-hand data over a “fairly lengthy” period (Hammersley, 2006:4), and through different methods, observations being the main one (Hammersley, 2018; Silverman, 2011). This involvement is important in research exploring the everyday as “it involves working with taken-for-granted and common-sense understandings” (Manchester & Pett, 2015:2).

Since the researcher becomes immersed in participants’ lives, it is expected that a trust bond between researchers and participants will be developed (Campbell & Lassiter, 2015; Waldorf, 2008). It is through that bond and immersion that the researcher becomes a key instrument of data collection and interpretation that puts the participants’ voices and actions at the centre (Waldorf, 2008; Emond, 2005). As Campbell and Lassiter (2015) suggest, ethnography “begins and ends with people” (p.4) and in that regard, it is “deeply subjective” (p.5).

Finally, this methodology has been defined as a “logic in-use” process (Green et al., 2012:309), where the researcher gradually makes sense of the things around her and practical decisions are “progressively focused over its course” (Walsh, 2012:250). The researcher’s role resonates with Kvale’s (2008) metaphor of the *traveller* constructing knowledge with the participants. In that process, the aim of an ethnographic methodology is not to elaborate generalizable theories or narrowly focusing on a single aspect, but a *thick description* (Geertz, 1973) and a *holistic* (Hammersley, 2018) and *in-depth* (Walsh, 2012) understanding of participants’ practices, perceptions and relationships.

4.1.2. Ethnographic approach to study young people’s digital practices

Drawing on ethnography to study young people’s digital practices entailed some consideration coming from Digital Technologies and Youth research field and approaches used to explore the connection of offline and online realms. The ethnographic study of young people’s technology use has drawn on multiple disciplines –including Media Studies, Literacy Studies, Childhood Studies and Educational Studies– (Livingstone & Drotner, 2008) and unsurprisingly Ethnography has been used in eclectic ways (Tobin & Henward, 2011). As seen in the literature review (Chapter 2), ethnographic approaches are common in the study of young people’s digital practices within and across contexts (e.g. Selwyn et al., 2017; Erstad, 2014; Kupiainen, 2011; Ito et al., 2010). However, they vary in terms of the researcher’s degree of immersion in the field, length of fieldwork, and methods used. In the study of youth digital

practices, ethnography has changed to a more focused and flexible approach (Hammersley, 2013), although maintaining the principles presented above (section 4.1.1.) where direct contact with participants, observation and special attention to context, culture, and *emic* aspects are central (Tobin & Henward, 2011).

The ethnographic approach of the present study considered the particularities of the context where fieldwork took place (school) and my position there, as well as the connected perspective adopted to study everyday digital practices within the school setting.

Regarding the first aspect, this research sought to understand the everyday use and negotiation of mobile phones by teenagers within the school. In those practices, teenagers are participating in different offline and online worlds. The online realm provides young people with new spaces for interaction and researchers with new spaces to collect data (Pascoe, 2012; Hammersley, 2013). However, this study did not adopt a virtual ethnographic approach (Hine, 2000), with the researcher collecting data on participants' online worlds from an *online position*. While acknowledging the interconnectivity between online and offline cultural worlds (Leander & McKim, 2003), the present study was offline-based, taking elements from traditional ethnographic methodology, particularly from what Ardévol and Gómez-Cruz (2013) identify as *Ethnographies of Internet in everyday life*. Recognising the impossibility for the researcher to be everywhere when studying digital practices (Wilson, 2006), fieldwork was located in the offline side of events. However, this study did not see the Internet as a "world apart" (Miller & Slater, 2000:5). Methodologically speaking, this entailed the incorporation of methods to gain access not only to daily offline activities inside the school, but also to online practices connected to the school world.

Also, regarding the context of this project, a study within the school setting entailed adapting to certain situations that do not necessarily make possible a long stay in the field. Securing access to students' daily routine entailed passing through different levels of authorities, from head teachers to teachers, as youth (digital) practices are immersed in institutional and adults' worlds (Bond, 2014). This will be described in more detail throughout the rest of the chapter (cf. section 4.6.), however, it is important to mention that this study incorporated schools as gatekeepers (Heath, Charles, Crow, & Wiles, 2007). Moreover, the process guaranteed treating participants as equal social actors as optimally as possible.

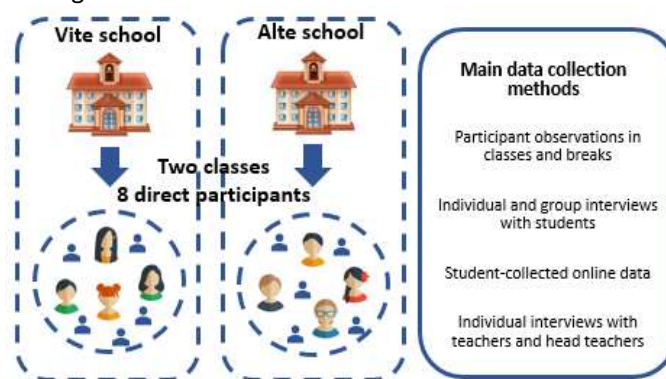
Another element considered in this study was redefinitions in ethnographic approaches to studying young people's cross-boundary digital practices, which are aligned with the theoretical framework adopted here (section 3.3.2.). The question to be addressed was how to gain access to young people in constant movement across different cultural worlds and participating in online and offline realms.

Traditionally, ethnography has involved spending time with a group of people or community (Hammersley, 2018). However, with the ever-increasing use of online-based and mobile digital devices, the definitions of ethnographic space and field have been redefined. The discussion has come mainly from Virtual and Connective ethnography, which has introduced new ways to study online spaces and practices (Hine, 2000). However, this has also impacted what constitutes the offline field (Hammersley, 2006). It is no longer about location in a singular place, but about tracing connections (Ardévol & Gómez-Cruz, 2013). For example, Leander & McKim (2003) have suggested talking about *sittings* instead of sites. Hine (2000) and Wilson (2006) use the term *flows* to acknowledge the movement and change across and within spaces and *cultural worlds* (Holland et al., 1998). In this view, to inhabit a space, in the sense of a researcher living with the participants immersed in their culture, it is no longer possible. Moreover, it also becomes more complicated to focus on a whole community or large group of people. For the research design of the present study, this entailed collecting data that made it possible to track flows of practices and perceptions across the school life of young people in their use of mobile phones (Drotner, 2013; Leander & McKim, 2003). Also, partly due to time constraints, this approach inspired a multi-sited fieldwork (cf. Hannerz, 2003) since the focus is on practices and meanings, and not solely on the educational institutions researched. This relates to defining the participants' negotiation of digital practices as the unit of analysis, putting the young person in movement and in practice at the centre, which is common in studies with a connected approach (e.g. Bjørgen & Erstad, 2015, Bulfin & Koutsogiannis, 2012). Thus, considering the different elements discussed here, a multi-method and multi-sited approach was used to trace connections between offline and online forms of practices and cultural worlds (Wilson, 2006). They were helpful to gain more in-depth and richer data on practices and young people in movement, in this case, within the school space.

4.2. Research Design Overview

This was an exploratory, qualitative, and ethnography-based study that took place in Santiago, Chile (Appendix A) between July and November 2015. That trip involved a Pilot Study in July-August and the Main Study between July and November⁴. The Main Study took place in two schools -Vite and Alte⁵- with similar characteristics but differing in terms of the way the school authorities and staff were dealing with mobile phone use (section 4.3.2.1.). The unit of analysis was the mobile phone negotiation in which *Segundo Medio* students (Year 11 / 15-16 years old) engage at school. Within each school, I spent time with students and teachers from a Year-11 class for three months. Data were collected mainly through interviews with students, teachers, and head teachers, as well as participant observations in classes and breaks. Within each Year-11 class, I worked with four students more directly, who participated in the study as key informants (Goldbart & Hustler, 2005). From now on, I will use the term *participants* to refer to students in both Year-11 classes, although strictly speaking teachers and head teachers were also participants, the former in interviews and observations and the latter in interviews. This is to emphasise the study's focus on students' digital practices. Figure 4.1. shows the key elements of the study's Research Design.

Figure 4.1.: Research Design Overview



This study aimed to understand how Chilean teenagers are negotiating their everyday mobile phone use within their schools. The research questions are the following:

RQ1: What elements in the school world are constraining or enabling teenagers' mobile phone use?

RQ2: How are teenagers negotiating their use of mobile phones in classes with teachers?

RQ3: How are teenagers orchestrating different positionalities in their use of mobile phones in school?

⁴ The school year in Chile is divided into two semesters (March-July, and July-December). The only official holidays during the school year are a Winter break in July (2 weeks) and a Spring break in September (1 week).

⁵ The schools' names mentioned in this document are pseudonyms.

Based on the ethnographic approach taken in this study, fieldwork went progressively from exploring participants' everyday (digital) lives in the school setting, to focusing on the multi-layered and relational nature of their mobile phone use. This was supported by a research design in which data collection methods were connected, and preliminary results served to inform the generation of instruments (section 4.4.). This process, however, did not mean that instruments were narrowed down into the different levels of the research questions (school, classroom, and the individual) over fieldwork. On the contrary, based on the notion of participants situated in the intersecting worlds of school and everyday phone use, methods served to collect data across the different levels. Although some were more effective than others, it is not possible to detect a one-to-one relation between each research question and certain methods. To shape the levels and ultimately answer the research questions, the data analysis was crucial. This started in fieldwork but addressed the questions more directly afterwards (section 4.5.). Thus, data coming from diverse methods serve to answer different questions.

4.3. Before data collection

This section describes the Pilot Study carried out, including its phases, activities, and implications for research design and data collection. Additionally, this section presents the main steps conducted to gain access to and select schools and participants for this study (Main Study).

4.3.1. Pilot study

Due to a lack of experience working with ethnographic methods and doubts about the focus of the study, I conducted a Pre-pilot Study in August and September 2014 with two Chilean teenagers living in the UK (table 4.1.; Appendix C). With each of them, I carried out two days of observations in their homes focusing on their digital practices and conducted one individual interview with them. This experience served to refine my research interest in the interconnection between teenagers' everyday digital practices and adults' and institutional worlds, gain expertise to conduct observations of teenagers' daily lives, and shift my attention towards the school setting. These insights were the basis for the first version of the research design, which was tested in the Pilot Study.

The Pilot Study was carried out in Chile and comprised two phases (table 4.1.). It aimed to get feedback about the design to gain access to, invite, and select participants; to pilot interviews and observational guides; to test the design of the participant observations during classes and breaks; and to test interview guides with teachers.

Table 4.1.: Phases and activities of the Pre- and Pilot Studies

Pre-Pilot Study -August-September 2014- UK

2-day observations at home and one interview with two Chilean teenagers living in the UK.

Pilot Study -July-August 2015- Chile

Phase one – July

Individual presentations of the project to four Chilean teenagers (3 males and 1 female) to get feedback; piloting of students' questionnaire.

Phase two – July-August - Bosque school

2 consecutive days – July: Participant observations of classes in one Year-11 class; participant observations in breaks and lunch time with 2 key informants; individual interviews with students and teachers; group interview with students.

August: one of the key informants (same Year-11 class) collected different kinds of online dialogues and provided feedback. A self-administered questionnaire was piloted.

Phase one of the Pilot Study resulted in improvements in the project's presentation slides, which were later used in the Main Study to motivate students to participate (Appendix E.2.). Pilot participants' feedback was useful to prepare myself for possible questions students may have regarding the Main Study, such as workload and benefits of participation. Additionally, their feedback on the students' questionnaire (Appendix G) led to corrections of typos and modifications of items.

Based on phase two of the Pilot Study, I redefined the order of some methods. For example, I decided to conduct teachers' and head teachers' interviews throughout fieldwork, instead of just at the beginning as originally planned. I also decided that fieldnotes would only be taken during class observations, but not during breaks to prioritise a more fluid and naturalistic interaction with students. I also realised that is not advisable to observe all the classes and breaks in one school day because of tiredness and reduced attention span. In the case of the interviews, I made the guides more flexible, connecting them with observational data and between themselves. Finally, regarding the self-administered questionnaire to collect and analyse online dialogues, I changed it into a 2-step procedure: participants' data collection and then an individual interview (more in Appendix D).

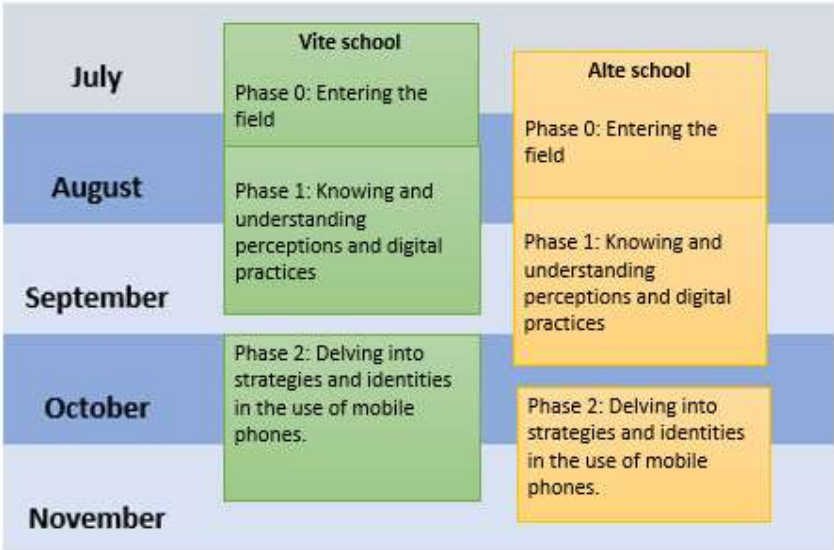
Before moving on, it is important to mention a complication that affected part of the Main Study. A recently finished National teachers' strike (mid-June) made my search for schools for the Pilot and Main Studies slower than expected. Some schools saw the project -especially its ethnographic component (visiting regularly and being there)- as an obstacle to making up for lost time. This delay caused the first phase of the Pilot Study to overlap with access to the Main Study schools and phase two with the start of data collection. This affected two things. First, the presentation of the project to gatekeepers and participants in the Main Study. There was not enough time to incorporate all the changes, such as methods and planning, into access documents and informed consents (Appendix E).

A second aspect affected was an interview at home with direct participants⁶ that was planned to be piloted, but this was not possible. A lack of time for processing this situation forced me to attempt to conduct it anyway in the Main Study. Problems in arranging it with the first couple of direct participants meant that I finally decided to eliminate it. However, a home interview was conducted with one direct participant (more in section 4.4.2.1.).

4.3.2. Main study – Entering the field

This section describes Phase 0 of the Main Study (figure 4.2.), namely the steps to gain access to the field and the sampling procedures used in two selected schools. Phases 1 and 2 of the study will be described in section 4.4.

Figure 4.2.: Organisation of the study phases in both schools, July-November 2015.



⁶ The reason for a home interview was related to a line of research that was dropped at the beginning of fieldwork, namely to explore the connections between students' school and out-of-school digital practices.

4.3.2.1. Selecting schools and getting in contact

As youth lives are embedded in adults' worlds (Bond, 2014), methodologically speaking, I followed a two-step purposive sampling procedure (Ritchie, Lewis & Elam, 2003). Firstly, a selection of schools, which worked as gatekeepers (Heath et al., 2007), and then the selection of participants –students and school professionals. This sampling procedure was conducted since I was looking for a certain kind of student in a particular school context. In a purposive sample, the participants “are chosen because they have particular features or characteristics which enable detailed exploration and understanding of the central themes and puzzles which the researcher wishes to study” (Ritchie et al., 2003:78). The two-step procedure ensured not only access and generation of trust among adults, but also a prominent space for young people to consider, understand, and accept the implications of being part of the study.

Two schools were found which met the selection criteria: Vite and Alte (table 4.2.). Both schools, located in Santiago city, are state-subsided⁷ (Appendix B) and co-educational; offer general training (non-vocational); display an intermediate level of access and educational use of technologies (Adimark & Enlaces, 2013); their Year-11 students are from medium socio-economic groups (MINEDUC, 2012⁸), and deal with students' use of mobile phones differently.

⁷ 92% of Chilean students attended state-subsided schools in 2015 (Appendix B, table B.2.).

⁸ The Ministry of Education' 5-level *SIMCE* classification: Low, Medium-Low, Medium, Medium-High, High.

Table 4.2.: Information about the two selected schools.

		Vite school	Alte school
Type of school*		State-subsided school, private-owned	State-subsided school, private-owned
Orientation*		Scientific-humanist (general training)	Scientific-humanist (general training)
Levels*		From 4 to 18 years old	From 4 to 18 years old
Enrollment 2015*		509	905
Average number of students per class*		36	32
Year-11 students' socioeconomic background 2015**		Medium-High+	Medium-High+
Number of Year-11 classes*		1	2 (One selected for this study)
Access and educational use of technologies	Total number of computers for students' use***	55	29
	ICT Use index*	27.4 (Intermediate level)++	23.37 (Intermediate level)++
	Facilities and equipment index*	69.01 (Intermediate level)++	69.01 (Intermediate level)++
	Management index*	73.73 (Intermediate level)++	49.84 (Intermediate level)++
	Computer lab use****	Computer lab in poor state and underused.	Computer lab functioning. Mainly used by primary-levels students.
Mobile phone regulations at the moment of the study, 2015****		There are no clear regulations about the use of mobile phones. School authorities are deciding what to do.	Total ban until Year 7. From year 8, students cannot use their phones in classes, but they can in breaks.

*Retrieved from <http://www.mime.mineduc.cl> in July 2015.

**Retrieved from www.agenciaeducacion.cl in May 2017.

***IDDE (2012).

****Provided by school authorities or staff during access.

+ Medium-High: most of the parents have declared having between 14-15 years of education, and a monthly income between 750,000–1,450,000 Chilean pesos (£1 on 24th December 2018 equals 875 Chilean pesos – www.oanda.com); and 9.01%-34% of the students in that class are considered to be “vulnerable” (MINEDUC, 2012).

++For a reference of the levels on a national scope, check Appendix B, table B.4.

The selection of schools needed to ensure two things. Firstly, having two schools with similar features, except for their ways of dealing with students' mobile phones. Secondly, having non-exceptional school contexts economically and technologically speaking. As the focus is on everyday phone use, these elements also allowed me to access non-exceptional participants in terms of their experiences at school and use of digital technologies. The intention here was not to achieve *Representativity*, but *Transferability* (Cohen, Manion & Morrison, 2007) to generate a discussion that could go beyond the school settings where the study took place and shed light on other Chilean or International school realities.

At Vite, my contact person was a member of the *Unidad técnico-educativa* (Technical-educational unit) of the school, who was also in charge of educational technology issues. In Alte, I got in contact with a Language teacher (chief of the Language department). I met both by email through some acquaintances. In both schools, head teachers learnt about the project through the contact people

and approved it directly through them. Both gave the contact person the responsibility of dealing with the project directly with me. I met each head teacher face-to-face when I interviewed them (section 4.4.3.).

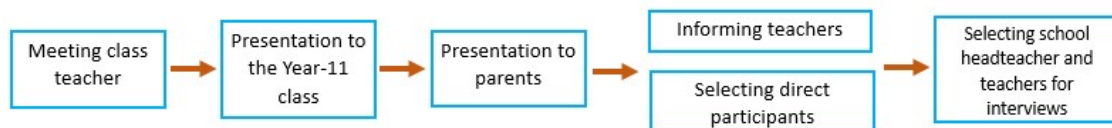
The formal acceptance of the project was straightforward. However, in both schools, particularly in Alte, there were some concerns around the amount of work my research could entail for students since for them it was important to keep their students' academic standards. In this context, it was crucial to have everything planned beforehand, including the access letter (Appendix E.1.). However, both contact people supported me in carrying out the whole process of entering the field, which I explain in the following sub-section.

4.3.2.2. Accessing the field and selecting participants

Participants of this study came from one Year-11 class in each school. From those classes, I selected four key informants (Goldbart & Hustler, 2005), who throughout the rest of the document I will call *direct participants*. The rest of the members of each class will be called *indirect participants*, if the distinction is necessary. Working with one class per school and direct participants from the same class aimed to generate a more in-depth understanding of the school world they share. In the following pages, I describe how I gained access to the field, selected the study classes and school professionals, and selected the direct participants.

Having the green light to conduct the study in both schools, I followed some steps to gain access to the class and participants and obtain their consent (figure 4.3.): Informal meeting with the class teacher; presentation of the project to students, parents and teachers; and selection of direct participants and school professionals. The selection of school professionals for interviews overlapped with the data collection phase (section 4.4.).

Figure 4.3.: Steps to gain access and select participants



The choice of working with Year 11 was first of all a way to access teenagers. Secondly, in Year 12, Chilean students start taking additional specialised courses in or out of school to prepare for University entry exams. Those new experiences add extra topics that this study does not cover. Finally, the findings of this study could serve as an interpretive basis to discuss representative and quantitative

data in Chile, which have been collected mainly from the same level (Livingstone et al., 2017; SIMCE-TIC, 2014; OECD, 2011).

In Vite, there was only one Year-11 class (n=30) and the school authorities put no constraints in my selection. In Alte, there were two Year-11 groups. I was told that they would prefer me to work with Year 11-A (n=32), which in their opinion was better behaved and more willing to participate. I did not consider this a problem, but something to be aware of in my future analysis of the data.

Meeting with class teacher

The meeting with the teacher in charge of each class was a short and informal meeting. It took place in the schools. One of its aims was to explain what I was planning to do and get feedback on what they thought about me working with their class. Its other aim was to ask them for help in coordinating the meetings with students and parents. Both class teachers showed interest and support towards the project.

Project presentation to students of the selected Year-11 class

I coordinated a day where I could go to each class to introduce myself and present the project to the students. In that session, I spent around 10-15 minutes showing a Prezi presentation to students (Appendix E.2.), and then I handed out a questionnaire (Appendix G) that had two aims: collect general information about personal interests and use of digital technologies and find out who would be interested in becoming a direct participant.

Project presentation to parents of the selected Year-11 classes

After the presentation to the students and knowing I had at least some students interested, I presented the project to the parents of the selected Year-11 classes in a previously scheduled parents' meeting⁹. In the first 15 minutes of the meeting, I presented the project to them using the same slides I used with the students (Appendix E.2.) and answered questions. Most of the parents in both classes already knew about my visit to the school and the presentation I gave to their children. In both cases, parents showed interest and wanted to know more about the selection process, the activities in the school, and possible activities outside school.

⁹ In Chile, there are meetings with all the parents in the class' classroom. Individual meetings exist but they generally are for specific and personal issues.

Informing Year-11 teachers

I planned a meeting with all the teachers who worked with the selected Year-11 classes to present the project. Additionally, I wanted to get consent to do observations in their classes, and eventually taking some students out of classes for interviewing, and interviewing the teachers themselves. In Vite school, it was not possible to call for a meeting because teachers had very different schedules, so teachers involved with the Year-11 class were informed of this by the contact person before or when I visited their lessons for the first time. In Alte school, the meeting took place only with four teachers, so the situation for the rest of the teachers was the same as in Vite. Teachers were curious and willing to help, and no teacher was forced to participate.

Selection of direct participants

The final step before data collection was an individual meeting with the pre-selected direct participants, based on information from the questionnaire (Appendix G): students who showed interest in participating in the study; with distinctive personal interests among them; owners of mobile phones, with or without Internet access¹⁰; and from different groups of friends (checked with the class teacher). These criteria aimed to yield diversity regarding the participants' experiences within the school and in their use of digital technologies and phones in their daily lives as teenagers and students. In that meeting, I asked them if they were still interested in participating and explained to them the activities involved. All of those I talked to said they wanted to participate. I handed them the informed consent and discussed it with them, and handed the informed consent for their parents (Appendices F.1. and F.2.; section 4.6.1.¹¹).

Originally, I was looking for two boys and two girls from each class in order to give gender balance to the sample. In Vite school, only one boy showed interest. After failing to convince other male students, I decided to work with one boy and three girls from that class¹² (table 4.3.). In part because of a lack of interest, I ended up with two girls from the same group of friends. Later, the third girl had some problems with her friends and moved to the group of the other two female participants. This situation had some impact on data analysis (section 4.5.2.4), but did not result in insufficient data. In Alte, approximately half of the class was interested in being direct participants, so there were no problems in selecting two boys and two girls. Regarding the participation of the rest of the students as indirect

¹⁰ In Vite school class, all students had a mobile phone. In Alte school class, only one student did not have one.

¹¹ After selection of direct participants, the same day or the day after, I handed informed consents to the rest of the students (Appendix, F.3.) and an information letter for their parents (Appendix F.4.).

¹² There was a fourth girl but she later withdrew from the study (section 4.6.3.).

participants, especially in Vite, there was some scepticism about the project and my presence in the school (more in section 4.6.2.).

Selection of head teachers and teachers for interviews

The research design included interviews with head teachers and Year-11 teachers (section 4.4.3.). The criteria for selection were: key authorities (head teacher, class teacher, and ICT coordinator), teachers with more lesson hours in Year 11 (Mathematics and Language), and teachers personally involved in key events (Green et al., 2012). As will be described later (section 4.4.2.), the classroom observations were planned to cover a variety of subjects and, at some point, repeating subjects to follow events' progression. These observations became the main factor in my decision of which teachers to interview throughout fieldwork. I only interviewed teachers whose lessons I observed on at least two occasions.

The final list of students and school professionals selected is shown in table 4.3.

Table 4.3.: Participants selected in both schools.

		Vite school	Alte school
Student participants	Number of students in selected Year-11 classes	30	32
	Gender distribution in selected classes	15 males 15 females	14 males 18 females
	Pseudonyms*, gender and age of direct participants	Alfredo (male, 15) Simona (female, 16) Rosa-Maria (female, 16) Constanza (female, 15)	Antonia (female, 15) Agustina (female, 15) Vicho (male, 16) Mario (male, 15)
Interviewed teachers** and head teachers		Head teacher ICT coordinator Mathematics teacher (class teacher) Language teacher English teacher History teacher Biology teacher	Head teacher Language teacher (class teacher) Mathematics teacher English teacher Orientation teacher Chemistry teacher Biology teacher

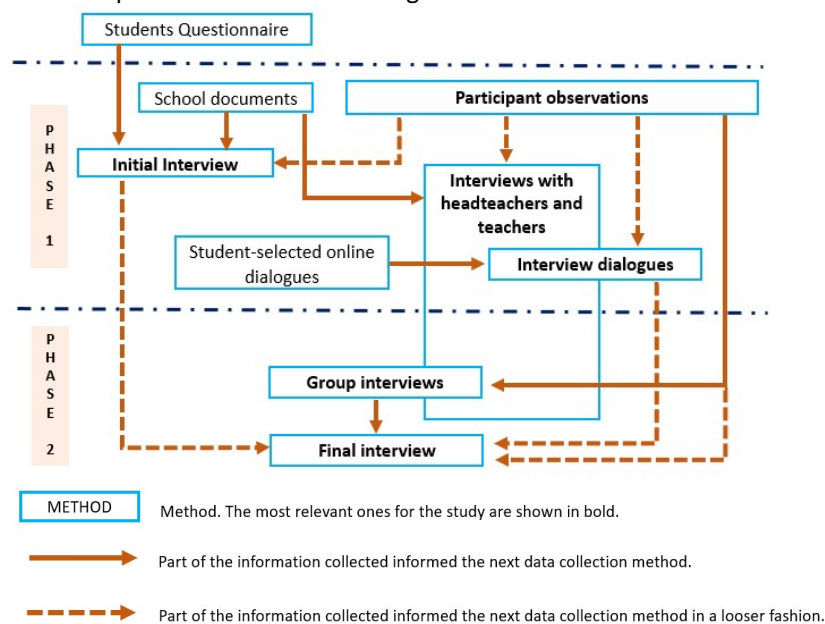
* Direct participants' pseudonyms were selected by themselves.

**The timetable and subjects per class are in Appendix N.

4.4. Data collection

After gaining access to the sites, data collection started. This process was divided into two phases over three months, between August and November 2015 in each school. Figure 4.4. shows a schematic version of the process in terms of methods employed and their connection. As will be explained below, the main data collection methods (interviews and observations - in bold) were designed in part considering data coming from other methods. This connective process also worked as the data analysis procedure during fieldwork (section 4.5.1.). The scheme is chronological, except from the participant observations which ran throughout the whole of Phase 1.

Figure 4.4: The relationship between methods during fieldwork in each school.



Phase 1 (figure 4.4.) enabled me to get acquainted with the school's and teenagers' daily routines in each class and understand what was taking place around the use of phones and other technologies in the school. This phase included participant observations in classrooms and breaks, individual interviews with direct participants, collection of documents on school regulations, and interviews with head teachers and some class teachers. Additionally, some data from the students' questionnaire in the selection process (section 4.3.2.2; Appendix G) ended up being used in the initial interview with direct participants (section 4.4.2.1.). Phase 2 sought to produce further details about the students' strategies to use mobile phones at a classroom level and positional identities associated to mobile phone use. To do so, group interviews were conducted with direct and indirect participants, as well as final individual interviews with direct participants. These methods were informed by data analysis coming mainly from participant observations and previous interviews (section 4.5.1.). The rest of the

teachers' interviews were conducted in this Phase. Table 4.4. shows the methods employed in each school throughout fieldwork.

Table 4.4.: Kind and number of methods used in each school site during data collection.

		Vite school	Alte School
Participant observations+	Number of days of observation	13 days	15 days
	Observations in classes	9 subjects (36.75 hours)*	12 subjects (39.75 hours)*
	Observations in breaks	13 breaks 5 lunch times (7 hours)**	16 breaks 7 lunch times (9.25 hours)**
Interviews with students	Initial Interview - direct participants	4	4
	Interview dialogues - direct participants	4	4
	Group Interviews	1 direct participants (x4) 2 indirect participants (1 boys x5, 1 girls x4)	1 direct participants (x4) 3 indirect participants (1 boys x4, 1 girls x4, 1 mix-gender x5)
	Final interview - direct participants	4	4
Interviews with head teachers and teachers		1 head teacher 1 ICT coordinator 5 teachers	1 head teacher 6 teachers
Other data collection methods		School regulation documents Students' questionnaire Student-collected online dialogues	School regulation documents Students' questionnaire Student-collected online dialogues

*Estimate based on the number of *horas pedagógicas* (class hours) observed (Vite=49 and Alte=53). Each class hour lasts 45 minutes.

**Estimate calculated with the average duration of breaks in both schools (15 minutes) and total duration of lunch breaks (45 minutes).

+See Appendix O for a breakdown of observations per school.

The descriptions and approaches of the main methods (observations and interviews) and how they were connected to each other will be explained in the following sub-sections. Other methods (students' questionnaire, school documents, and student-collected online dialogues) will be explained in relation to how they were connected to the main methods.

4.4.1. Participant observations

Participant observations took place inside the school setting throughout phase 1 and were registered in hand-written fieldnotes. Phase 1 lasted five weeks in Vite and six weeks in Alte. During those weeks, I visited each school 2-3 days a week. On visit days, I observed an average of two lessons of different subjects and two breaks (or lunchtime) (Appendix O).

In this study, participant observations are defined as the practice of establishing natural moments within the school day “in order to investigate, experience and represent the social life and social processes that occur in that setting” (Emerson, Fretz, & Shaw, 2001:352). Overall, they worked as the starting point of data collection in the sense that they provided data for the interviews with students and school professionals. This approach comes from putting the students doing, interacting, and using mobile phones in a predominant place. This approach also allowed me to experience and share moments -in classes and breaktime- with participants. Therefore, their digital practices and their context became one of the key elements to talk about, delve into, and discuss with them in the interviews.

Participant observations focused on the direct participants (4 per school). This was for two reasons: assuring attention to individual digital practices, interactions, and positionalities, as well as meeting ethical standards to reduce concerns about what I was doing, which was a common (and expected) question from students and teachers throughout data collection. The Pilot Study showed that focusing on one of them per day made the observations even more ethical and more practical in terms of where I would go in case direct participants moved to different places during classes (e.g. group activities) or during breaks. Thus, after the first two or three days of observation (table 4.4.), which allowed me to become familiar with classes’ and school routines, I started focusing on one direct participant per day: more or less one per week. The students and class teachers were informed of this after the first couple of days, and the relevant direct participant agreed in a face-to-face conversation with me the day before. Despite this individual focus, observations aimed to provide context to direct participants’ actions and, more broadly, digital practices performed by participants in both classes. Thus, fieldnotes incorporated descriptions of circumstances, main activities, and events, as well as indirect participants’ and teachers’ interactions and other direct participants’ when together (e.g. table 4.5.; Appendix I).

Participant observations are divided into two categories: classes and breaks. No observations were carried out during exams.

4.4.1.1. Observations in Year-11 classes

The first kind of participant observations took place during classes. It is important to mention that in both schools – and in most schools in Chile – students stay in the same classroom throughout the school year and it is teachers who move across classrooms. Some classes, however, took place in the playground, pitch, library, or science lab. The observations were made in different subjects; therefore, they took place mainly in *the* classroom, but not exclusively.

In both classrooms, I sat at the back, taking notes of what was happening. If the lesson took place somewhere else, I found a spot with good visibility without interrupting the teacher's or students' work. Fieldnotes focused on any reference to or use of digital technologies in general, and mobile phones in particular, the relevant direct participant's interactions and digital practices, and teacher-class interactions and context. I used a small notebook and a multi-coloured pen to highlight direct participants' behaviours, references to or use of phones, and my own reflections (Emerson et al., 2001). Table 4.5. shows an extract of *raw* fieldnotes in one class (more in Appendix I).

Table 4.5.: Biology class, day 9 of observation, Vite school (extract).

<p>Teacher asks students to take their hoodies off.</p> <p>Teacher: "Put that phone away, classes already started, <i>desubicada</i> (you're out of line)!" To somebody seated in one of the front rows (Rosa-Maria's group).</p> <p>[Rosa-Maria moves to another seat today, where F normally sits, but F is not here today]</p> <p>(...)</p> <p>Students start working. Lots of noise. They are restless.</p> <p>Teacher: "MJ, can I teach or what?"</p> <p>Teacher approaches JP and asks her: "Why do you have your mobile phone on the desk? JP says nothing back, just puts her mobile away. "Put your mobile away. Everyone, put your mobiles away!" "Mobile phones are due to be used when we do research, not for social life". [Find out about these research projects]</p> <p>Teacher is walking by the desks. The class is very noisy, while working.</p> <p>Teacher: "You came to school with a very nice attitude today" [ironic tone]</p> <p>M is checking his mobile phone behind his lunch container on his desk.</p> <p>10.05 MS [one of the class reps] reminds her classmates to pay for the party on Friday and for the class top.</p> <p>Teacher tells her off for not asking for permission to talk to the class.</p> <p>(...)</p> <p>10.15 Alfredo checks his mobile phone</p> <p>Teacher checks her own mobile phone. Everyone can see her doing it. Nobody says anything to her</p>
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Legend: references to or use of mobile phones in **bold**; things related to direct participants in **red**; and researcher's personal notes or reflections in **green**. Direct participants are referred to by their pseudonyms and indirect participants by their initials.

The only moment I stopped taking notes was when somebody addressed me directly. In those cases, I interacted normally and took notes afterwards. Overall, my role in classes was what Matthews and Ross (2010) describe as *observer as participant*, which means that the researcher is upfront about her role, but avoids interacting with participants. More than something planned, my activity remained within what lesson structure permitted, with the teachers being in charge of what was taking place (more in section 4.6.2.).

4.4.1.2. Observations in breaks

A second way of carrying out participant observations was during breaktime and lunchtime, spending time with one direct participant and their friends. In those situations, I had a *participant as observer* role (Matthews & Ross, 2010), which meant that participants were aware of my aims, but I was looking to be part of their interactions. I let the participants decide where to go and what to do, and I got engaged in their activities. For example, during one break (Day 7 in Alte; Appendix O), I ended up playing volleyball with the group of friends I was with. As the Pilot Study showed (section 4.3.1.), pretending to be just an observer in breaks was uncomfortable both for students and myself. Thus, I did not take notes during breaks, but I registered them as soon as a *spare time* was available. However, sometimes direct participants stayed in the classroom during breaks, so depending on my involvement, I could come back to my *observer as participant* role (Matthews & Ross, 2010), which gave me time to take some notes. Table 4.6. shows an extract of “raw” fieldnotes taken during a lunch break.

Table 4.6.: Lunchtime, day 7 of observation, Alte school, break with Agustina (extract).

(...) ... P and Agustina are playing volleyball. MI, BR, B, and JM have been rotating and playing for a while and then leaving. I can tell Agustina is a bit uncomfortable [it must be what they discussed earlier about the play in Arts class]. At some point of the game, Y interrupts the game to talk to P, and I am almost sure it is to talk about what happened earlier. After a while, Y and C sit next to me in the same bench where I was. They do not talk to me. In the meantime, Agustina left the volleyball game to pick up the ball that ended up far away and stopped to say hello to a friend from another class. She threw the ball back to her friends, who were still playing, and stayed with her friend. She shows something to him on her phone. Then, she also shows it to P. The bell rings. It is the end of the break.
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Legend below table 4.5.

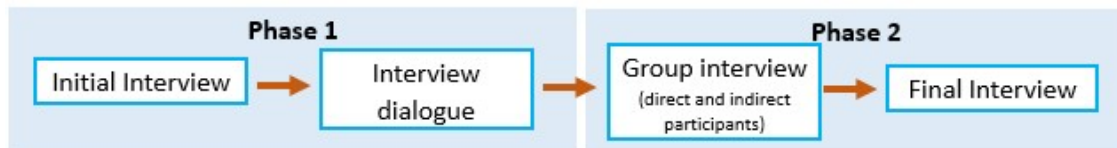
Observations during breaks were in essence unexpected, especially the first one or two breaks with each direct participant. They were about discovering what they like to do and how they relate with their group of friends in more detail. Moreover, they were interacting with me in diverse ways, for example, from leaving me out of the conversation to talking to me all the time. On the contrary, observations in classes are part of an expected framework or *cultural world* of the classroom, where

roles are more clearly defined. Some students and teachers mentioned to me that they “were used to have people observing the class” which shows that my role in the classroom did not need as much explanation as in breaktimes. However, this does not mean that everything that took place in classes was expected. On the contrary, as will be discussed in more detail in the data analysis section (4.5.1.), unexpected events were key moments of reflection that connected observational data with interviews. Overall, the experience of observing both class groups was good, although a bit more difficult in Vite. In this group, it took longer for some students to relax in front of me and for me to get involved in their activities. The other group (Alte) showed a *helper attitude* (Emond, 2005) much earlier as a whole group (more in section 4.6.2.).

4.4.2. Interviews with students

An essential part of this study is to understand how young people are using and signifying their mobile phone use. Hammersley (2013) argues that, in ethnographic work with young people, it is not always possible to elicit perceptions and beliefs through observational techniques. Therefore, four kinds of interviews with students were included (figure 4.5.), which in most cases were constructed based on key events (Green et al., 2012) observed during fieldwork. In phase 1, the interviews were only conducted with direct participants to understand individual and collective mobile phone use in the class as well as schools’ regulations. In phase 2, group interviews and final individual interviews aimed to characterise negotiation and positional identities in mobile phone use.

Figure 4.5.: Interviews in each phase of the study.



Interviews with students included the use of prompts of different kinds (described below) to elicit conversation and generate trust (Kwasnicka, Dombrowski, White, & Sniehotta, 2015; Pascoe, 2012). All interviews were semi-structured (Matthews & Ross, 2010) and guides were used (Appendix H). However, digressions were allowed to add a conversational tone to the interaction. Interviews with students worked more like a dialogue (Kirk, 2007) or exchange of views (Kvale, 2008). Moreover, as an ethical strategy (section 4.6.2), I encouraged students to talk about their personal interests and asked questions to know more about them. Table 4.7. shows some examples of the information elicited in the interviews, some of which is not directly related to the study.

Table 4.7.: Interview extracts showing mentions of personal issues.

<p>What are your favourite apps? [They interrupt, showing me some photos of classmates sleeping on their phones] ... That is the one! I think I was there that day Ev: hahaha Poor P.... [He is in one of the photos] W1: yes, we were there all that day, when M was sleeping. What I was asking?... ah, okay, what were your favourite apps? W1: Snap.... Mmmm, I have them here [looking for them on her phone]. (Group Interview, girls, Vite school)</p>
<p>Ah! This Saturday I am going to the Colour Run, that is a marathon, I am going to record it. Good Idea! I am going with <i>los chiquillos</i> (referring to his group of school friends) Who is going? /I am going/ with T... not V because he is going to the Spartan Nights [?] (...), but K, J, and T are going. Sisters are coming, my sister, some girls from Year 10 we get along well, friends from /the other/ Year-11 class, so it is a big group. (Mario, final interview, Alte school).</p>

Legend: Transcription protocol in Appendix J. Direct participants are referred to by their pseudonyms and indirect participants by their initials.

For each type of interview, there was a generic guide, but for each session I added questions about situations observed, or information about the class or school I wanted to check (e.g. school projects, unexpected situations, and doubts) (Creswell, 2013). In individual interviews, I also added personal events to be explored with each direct participant. In other words, through the interviewees, I learned about people, their contexts, and their practices. The idea was to co-construct a shared understanding between interviewees and myself. The interview process was seen as a social and negotiated situation (Lange & Mierendorff, 2009). Thus, each interview guide had common elements, but also personal or contextual elements. Appendix H, which contains the interview guides, presents a generic version for confidentiality reasons.

Interviews with students took place in school premises (except for one which is explained below – section 4.4.2.1.). This was a big advantage in terms of fieldwork organisation, and also allowed me to have a private and appropriate place for recording. In both schools there was at least one suitable space for this. At Vite, interviews took place in the library (when closed for other students) or in a private room available for parents' meetings. At Alte, interviews took place mainly in one of the parents' meeting rooms. Exceptionally, some interviews took place in the school yard or an empty classroom, when nothing else was available. All interviews were audio recorded.

4.4.2.1. Initial interviews (phase 1)

Initial interviews were semi-structured and conducted individually with direct participants. They took place after collecting some observational data of the relevant participant, preferably, the same day or day after. The purpose of these interviews was to start knowing the direct participants and their schools (Appendix H.1.). The first part of the interview was based on individual information taken from the students' questionnaire that was applied in the selection process (section 4.3.2.2.). This information was about hobbies, interests, and use of technologies. The latter topic segued into the second part of the interview, where we talked about their use of phones and social media in relation to classmates. Finally, we talked about their school phone regulations, based on official information in school documents.

For the section about technology use and classmates, I used a revisited version of an *ego network* used by Livingstone and Sefton-Green (2016) in a study with a class of 13-14 year olds in London. They asked each student to write the name of people important to them on a blank page, which allowed them to refer to people on it while answering questions in individual interviews. Using the same principle, I brought pieces of paper with the names of their classmates written on them. Then, I asked each interviewee to organise them in terms of closeness. This technique allowed me to learn more about the interviewees at a point of the study in which I was not acquainted with their classmates' names. Some of them made two groups, separating friends from non-friends; and others made three groups based on degrees of closeness. The main purpose was to identify their group of school friends and close classmates, to later find out more about how they interacted with them through social media and mobile phones. It also allowed me to know more about the class and general relationships. Finally, I asked the interviewees to add their out-of-school friends and relatives to their selection of closest people to discuss how they communicate with them via mobile phones.

All initial interviews took place at school except for one with Antonia (Alte school). As explained in section 4.3.1 on the Pilot Study, a home interview was part of the original research design but could not be piloted. At the beginning of the data collection phase, I tried to conduct the home interviews anyway. However, after some unsuccessful attempts in arranging those, I decided to eliminate them. In the process, I managed to conduct a home interview with Antonia, which was also necessary due to time constraints that made it impossible to arrange her initial interview at school. Thus, only in her case, the initial interview was conducted at home together with the original home interview. Only the data coming from the initial interview guide was analysed, but that experience at her place had a positive impact on the rapport built with her.

4.4.2.2. Interviews on online dialogues (phase 1)

The interviews on online dialogues aimed to delve into what direct participants do with their phones in the school setting. In doing so, students were asked to collect online dialogues based on a set of instructions (Appendix H.2.), which were then discussed in an individual interview. Reviewing online content together with young people has been identified as a good methodological technique to understand their technology use as they do not necessarily know how to make sense of or explain it (Pascoe, 2012). Observational and interview data allowed me to access what participants were doing online on their phones in a general sense, but the dialogues enabled me to discuss in more detail the importance and sometimes urgency participants attached to their phone use in school. This method also allowed me to access naturalistic online interactions without increasing the intrusion that an in-situ study already entails (Timmis, 2009).

At least a week before this interview took place, I handed out and discussed with each direct participant the instructions for them to collect online dialogues (Appendix H.2.). An online dialogue was a set of at least 8 statements by the direct participant and at least one other person on any online platform or website. I asked for two dialogues that they felt were good examples of what they do with their phones on a daily basis. The first dialogue must have had happened using their phones while inside the school. The second dialogue needed to be about any school-related topic that they found important. Most participants brought in more than one dialogue per category and most of the dialogues were Whatsapp dialogues. I told participants they could send them to me beforehand, but only one of them did. In the rest of the cases, the dialogues were in their phones while we discussed them, and they were sent to me afterwards in a screenshot format. The agreement was that participants needed to ask those involved in the dialogues for their consent. I checked this with them at the beginning of the interview; afterwards, I also asked the students involved in the dialogues for their consent (section 4.6.1.; and Appendix F.7.).

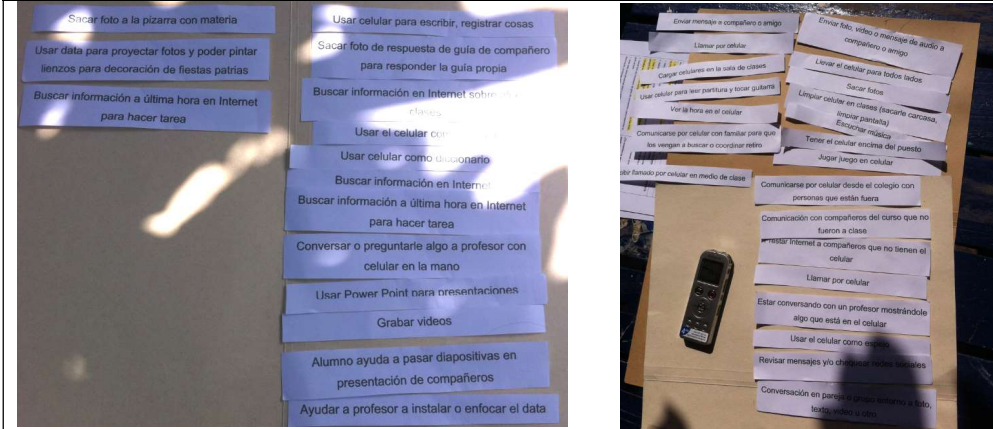
In the interview, direct participants were asked to explain why they selected each online dialogue and why it was representative of their daily phone or social media use. Talking and reflecting on the selected dialogues worked fine. However, interviewees not always found that their selected dialogues were the best examples. It was a common practice to erase Whatsapp conversations to free space on their phones, so in the interview they had the chance to talk about those dialogues they no longer had with them but were better options in their view.

4.4.2.3. Group interviews (phase 2)

After finishing participant observations, at least a month later after the beginning of data collection, group interviews with direct and indirect participants were conducted in each class (three in Vite school and four in Alte school - table 4.4.). In each school, one of the interviews was held only with direct participants (n=4), and the others were conducted with groups of friends (n= 4-6). The aims of the group interviews were to elicit their opinions about mobile phones at school and their associated rules, as well as to understand more about the reasons and purposes of using them at an individual and collective level.

Each group interview was based on a broad categorisation (Braun & Clarke, 2013) of digital practices involving mobile phones (and other digital technologies in some cases) that were identified mainly based on observational data. The categorisation can be found in the interview guide (Appendix H.3.). For the interview, I wrote down all the practices identified per school on little pieces of paper. In the first part, I asked each participant to select all the digital practices that in their opinion represented their own daily use of mobile phones. In the second part, I asked the whole group to organise the practices into categories of their choice (e.g. figure 4.6.). All the groups used the categories academic/non-academic, but some also employed criteria such as place of occurrence or forbidden/non-forbidden. Each group did this 2-3 times. Their categories were very similar to the ones I already had and mine sometimes served me to guide the interview when the participants did not come up with categories by themselves.

Figure 4.6.: One categorisation made during one group interview, mixed, Alte school.

 <p>The figure consists of two photographs. The left photograph shows a collection of blue sticky notes with handwritten text in Spanish, organized into two columns. The right photograph shows a similar collection of white sticky notes, also organized into two columns, with a small black mobile phone placed in front of them for scale.</p>	
Category: in their words, “for school”, and “for ourselves” (academic/non-academic)	
School <ul style="list-style-type: none">-Take pictures of the whiteboard-Use projector for enlarging photos for decoration-Look for information on the Internet to do homework at the last minute-Use phone to write, register things-Take a picture of classmate’s worksheet to answer mine-Look for information on the Internet for something class-related-Use calculator on the phone-Use dictionary on the phone-Look for information online-[Repeated]-Approach teacher while holding phone-Use Power Point for presentations-Record videos-Classmate helps changing slides during presentations-Help the teacher to set up projector	Themselves <ul style="list-style-type: none">-Text classmate or friend-Make phone calls-Charge phones in the classroom-Use phone to look for guitar tab-Check time on the phone-Contact relative to ask her to pick you up-Receive call in the middle of classes-Send photo, video, or audio messages to classmate or friend-Take your phone everywhere-Take pictures-Clean the phone in classes-Listen to music-Have the phone on the desk-Communicate by phone from school with people outside-Communicate with classmates who did not come to school-Share Internet connection with classmates-[Repeated]-Chatting with a teacher while showing something to him on the phone-Use phone as a mirror-Check incoming messages and/or social media-Chatting in pairs or in a group around a photo, text, video, or other media

The point was to collect their impressions using the practices and categories as prompts, not to find a match with my own opinions or categories. I wanted them to think about their own digital practices in different ways. In that sense as well, some of their categorisations changed during our discussion. The whole process elicited conversation about how each of them saw their phone use at school, their relationship with teachers, and what they thought about school and teachers’ regulations. Among all the kinds of interviews, this is the one with the most discussion, meaning negotiation, and *member checking* (Creswell, 2013; section 4.5.1.).

While discussing their selection, it was common for memories of events or related stories to come up. I gave space for these because sometimes there were good examples of key issues included in the

interview guide (Appendix H.3.). However, it was more difficult than in the individual interviews to give an end to them, which was to be expected since here they were with classmates and friends. The next example shows a moment in a group interview when the participants got *distracted* with their mobile phones, and it was a good opportunity to delve deeper into the topic:

Table 4.8.: Interview extract showing helpful digression. Group interview, girls, Alte school

<p>NNw: that shouldn't be [using mobile phones in some lessons].</p> <p>W1: for example, now Y is talking to us in the [Whatsapp] group the six of us are in [checking her mobile phone].</p> <p>Ev: Yes? Hahaha</p> <p>NNw: do you want to see something?</p> <p>[Inaudible, everyone is talking]</p> <p>Ask her to say hello, so she can be part of the recording, haha.</p> <p>(...)</p> <p>NNw: ok!</p> <p>So, what just happened, is it pretty normal? That Y is not here, and she is sending messages.</p> <p>NNw: yes.</p> <p>W2: when somebody does not come /to school/, /that person/ is sending messages all day."</p> <p>(Group interview, girls, Alte school)</p>
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Legend: Transcription protocol in Appendix J. Regarding participants: W or w stands for "woman", Ev stands for "everyone", and NN stand for "non-identifiable".

4.4.2.4. Final interviews (phase 2)

The final individual interview took place after all group interviews were finished. This interview was only with direct participants and was informed by data coming from different sources: initial interview, group interview with direct participants, and participant observations.

The aim of the final interview was to share and discuss preliminary results about students' individual phone use in school and its associated positionalities (Appendix H.4.). For the first part, I brought a summary of how I would describe each of them drawing on my experience with them in the field and self-descriptions from their interviews (table 4.9.). This was used to member-check with them (Creswell, 2013) and as a prompt to elicit responses to be connected later to their mobile phone use.

Table 4.9.: Example of one description made for a direct participant's final interview.

<p>Rosa-Maria, Vite school</p> <p>"Reader". Loves physical books; writing; reading; listening to music.</p> <p>Talented person; you sing, write, speak a second language. You are writing your own novel, and writing the script for a role playing video game with a friend at school.</p> <p>Your personal interests are visible in your clothes, accessories, phone case, Whatsapp chat group wallpapers.</p> <p>At some point, you described yourself as "antisocial", somebody who likes to be alone in her own space.</p>
--

In the second part, I used a list of digital practices I considered to be representative of each interviewee. This list was based on their own selection done in the group interview, and in some cases, events observed in Phase 1 (table 4.10.). I explored with them what they thought about the list and how they saw themselves as phone users. The group interview was not the space for talking about themselves, so this more private space allowed this. The final interview finished with questions that made them reflect on how they saw themselves and their mobile phone use within the school setting.

Table 4.10.: Example of individual selection of digital practices to be discussed in final interview

<p>Rosa-Maria, Vite school</p> <ul style="list-style-type: none"> -Some classmates recording with their phones an oral summary you were giving of a novel for English class. -You are planning your novel in the diner, lunchtime, asking your friends things about it and looking for related topics on the phone. -Texting people out of school. -Looking for information on your phone; doing your homework at the last minute with the help of the phone; listening to music.
--

Overall, interviews with students allowed me to progressively move from a general exploration of their digital practices and lives in school, to a deeper, but preliminary, understanding of their mobile phone use in connection to themselves individually and collectively inside and outside the classroom.

4.4.3. Interviews with head teachers and teachers

So far, I have described the journey that the participants of each class went on in this project. As mentioned earlier, apart from the observations and interviews with them, I conducted semi-structured interviews (Matthews & Ross, 2010) with the schools’ head teachers and Year-11 teachers throughout phase 1 and 2 of data collection (7 in each school). These are discussed in detail in subsequent sections.

These interviews were more formal and structured than the ones with students (Appendix H) and no prompts were used, although references to collected data were made. Thus, as in the interviews with students, these interviews were also connected with other methods, mainly observational data and school documents. The purpose of these interviews was to contextualise observed events and obtain more information about students’ phone use and rules enforcement. All the interviews with head teachers and class teachers took place in the schools’ premises and were audio-recorded.

4.4.3.1. Interviews with head teachers

Interviews with head teachers sought to collect more information about school functioning, use and availability of digital technologies, and regulations and issues associated to phone use (Appendix H.5.). In one school (Vite), the ICT coordinator was also interviewed to learn about the state of the school's computer lab, why it was not used so much, and mobile phone regulations (Appendix H.5.). In the other school (Alte), it was not possible to interview the person in charge of the computer lab after several attempts.

4.4.3.2. Interviews with teachers

In the case of teachers, the focus was on learning more about the school routines, the class under study, their own use of digital technologies in the school, and students' mobile phone use (Appendix H.6.). The aim was to understand more about the relationship between teachers and students around digital technologies and phone in the classroom. For confidentiality reasons, I only asked about classes as a whole and not about any individual student. All teachers interviewed were observed at least twice while teaching their lessons.

4.5. Data analysis

To analyse data in this study, a holistic approach (Hammersley, 2018; Creswell, 2013) was adopted, especially after fieldwork. This was necessary due to the amount of data collected and the interconnection between data collection methods (section 4.4.). In line with the idea of an ethnographic researcher who is progressively and recursively making sense of data (Green et al., 2012; Walsh, 2012), the analysis in this study started in fieldwork and went through all the way until writing up the findings chapters (Chapters 5, 6, & 7).

The following principles guided the whole process. Firstly, perspectives on qualitative analysis as iterative and inductive. In particular, I drew on Miles, Huberman, and Saldaña's (2014) notion of qualitative analysis as "flows of activity" (p.12) between data collection, transformation of data, display of data, and drawing conclusions. The process also drew on Hammersley (2008), who regards the researcher's constant interaction with the data, active construction, and imagination as key elements of analysing big and unstructured amounts of qualitative data. In accordance with this, the analysis process drew on notions of the methodological approach taken here (section 4.1.), in which tracing events, themes, meanings, and positionalities across cultural worlds of everyday and schooling

was central (Drotner, 2013; Leander & McKim, 2003). Analytically, this entailed looking for methods and procedures that reduced as much as possible the loss of connections between elements, especially the relation between phone use and context (cf. Erstad, 2014). Finally, Memoing (Birks, Chapman & Francis, 2008; Emerson et al., 2001) was a key element throughout the data analysis process –although it was more directly used for analysis after fieldwork. Taking reflective notes, diagramming themes and events, and even doodling became key elements in the process to elicit reflection and ideas, also informing the process of writing up the findings (O’Reilly, 2005; Creswell, 2013).

Different data analysis methods or techniques were used depending on the stage of the research. These will be explained in the following pages as part of the main stages of data analysis: before and after fieldwork.

4.5.1. During fieldwork

Three data analysis methods were used during fieldwork, allowing the connection and construction of instruments along the way, as shown in section 4.4.: event analysis, thematic analysis, and member checking.

4.5.1.1. Event analysis

Event analysis was key in the connections between methods. Green et al. (2012) state that the basis of ethnographic research as *logic-in-use* is that researchers will have to observe and deal with unexpected events, which they call “rich points” (p.310). When these events happen during fieldwork, the researcher must make sense of clashes between expectations, frameworks, or ways of understanding the phenomenon under study. This is why reflection by the researcher and participants is key to make sense of events (Angelides, 2001). For example, in Vite school, at some point during fieldwork, the electricity supply was cut from the sockets used by the students in the classroom (section 5.3.2). I identified this situation as a *rich point* as it was not only related to financial constraints (official information) but to an attempt to control students’ phone use. Thus, once it took place, I traced this event in later observations and interviews. I identified *rich points* mainly during observations, but not exclusively. For example, a situation that took place in Alte school with a student (section 5.3.1) was not something I observed, nor did it even happen while I was conducting fieldwork, but I identified and followed it up in subsequent interviews.

4.5.1.2. Thematic Analysis

During fieldwork I also drew on thematic analysis, which is a “method for identifying, analysing and reporting patterns (themes) within the data” (Braun & Clarke, 2006:79). Thematic analysis was used in a rudimentary way across fieldwork to connect data coming from different sources. Particularly for group interviews, it had a key role for the development of the guide (section 4.4.2.3.; Appendix H.3.). In this case, thematic analysis was used to organise and categorise practices involving mobile phones coming from observations and interviews. I generated themes grouping practices, such as “ability to adjust or working around”, or “academic” and “non-academic”.

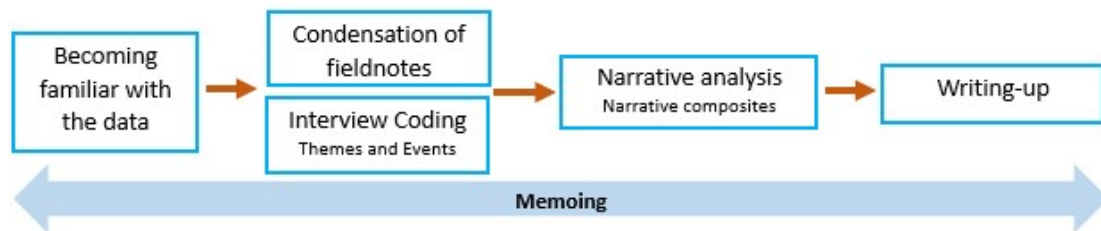
4.5.1.3. Member Checking

The presence and engagement of participants in fieldwork, particularly of direct participants, aimed to foster collaboration in connecting and interpreting preliminary results about their digital practices in school, as well as their self-perceptions. The method to get them involved in the analysis, especially in the interview about dialogues (section 4.4.2.2.), group (section 4.4.2.3.), and final interviews (section 4.4.2.4.) was Member Checking. This technique “involves taking data, analyses, interpretations, and conclusions back to the participants so that they can judge the accuracy and credibility of the account” (Creswell, 2013:252). I would add, however, that in this case it went a bit further than just judging, since it also about encouraging them to reflect about what they collected or my interpretations of related topics (Kirk, 2007). Thus, this method served to incorporate participants’ views into the analysis and boost research Credibility (Cohen et al., 2007).

4.5.2. After fieldwork

The large amount of data and the absence of participants were important differences and challenges when it came to the data analysis after fieldwork. A crucial aim of this part was maintaining the link between digital practices and the students who perform them, in the context where they are performed, and the interactions involved around them. It was necessary to adopt a holistic and connected approach (Hammersley, 2018; Creswell, 2013). It was a very iterative process, although in a schematic and ideally chronological way it could be described like this:

Figure 4.7.: Steps in the process of data analysis after fieldwork



4.5.2.1. Familiarising myself with the data

Once data collection was finished, a phase of familiarising myself with the data took place. I re-read fieldnotes, and re-listened to interview audios and transcribed them. I also re-read reflective notes I took during my fieldwork. Research questions and theoretical framework were in the background, but not in a leading role during this phase.

This process made it possible to identify three levels of data to guide the analysis, which also refined the research questions: school, classroom, and individual. This phase also, although overlapping with the next two, allowed me to see that there were two key components in the analysis of digital practices in this study: events and themes (Maxwell & Chmiel, 2014). The former refers to the search of patterns across methods (horizontal analysis), which is related to a search for stories and narrative methods (Riessman, 2008). The latter refers to the search of patterns within the methods, which lead to the identification of themes (vertical analysis). Thus, levels and components allowed me to organise data analysis into the following phases, maintaining the connections and relations between students' digital practices, their interactions, and the context.

4.5.2.2. Observational Data Condensation

In the analysis of fieldnotes, it was important to visualise the relationship between student(s) and teachers, students and other people in and out of school, and the focus on the direct participants. To do this and extend the event analysis used in the field, I chose the data condensation method. This is the “process of selecting, focusing, simplifying, abstracting, and/or transforming the data that appear in the full corpus (body)” (Miles et al., 2014:12). I see this process as a method since it inspired me to try different things, such as highlighting, selecting, and re-structuring data. In doing this, I was able to see patterns and select events, as well as visualise more clearly the levels of study. Therefore, seeing this process only as data organisation would not do justice of the reflection and process that took place.

There were four steps or versions of condensed observational data. Firstly, converting hand-written notes to a digital format. Secondly, the now digital notes were passed to a self-generated grid, which was the key instrument in the analysis of observational data (figure 4.8.). From this grid, two other versions came that were used in the illustration of findings: one that aimed to explore teacher-student(s) relationships in the classroom (e.g. section 6.1.) and another that focused on producing ethnographic portraits of some events (Emerson et al., 2001) (e.g. section 5.3.2.). An example of all the versions can be found in Appendix I. It is important to consider that more than a real linear process, this was an iterative process informed by the interview coding process (next section).

Figure 4.8.: Main grid in the analysis of observational data.

DAY / FOCUS	Day 1: general observation, 11.08.2015			
SUBJECT / BREAKS	ENGLISH			
CONTEXT	Classroom			
MOMENTS OF THE CLASS / BREAK				
CLASS AS A WHOLE / OTHER STUDENTS				
CLASS / OTHER STUDENTS WITH TECHNOLOGIES				
Rosa-Maria				
Alfredo				
Simona				
Constanza				
OTHER (events, activities)				

4.5.2.3. Interview coding

Drawing on thematic analysis (Braun & Clarke, 2013; 2006), all interviews were coded using Nvivo 10. Codes combined the levels of the research questions (school, classroom, and individuals) and distinguished between events and themes. Table 4.11 shows an extract of the the final codes in Nvivo for students at Vite. Some codes were constructed using one kind of source (e.g. school and classroom level, group interviews), while others (the majority) were generated using different interview sources. The whole list can be found in Appendix K for both schools, which also includes the codes for the interviews with headteachers and class teachers. The development of codes incorporated memoing and preliminary findings in observational data. In this regard, the coding process was iterative, coming back to transcriptions and codes.

Table 4.11.: Nvivo coding extract for participants' interviews in Vite school.

<p>SCHOOL AND CLASS</p> <p>School</p> <p>School - use and regulations on technologies and phones</p> <p>Class</p> <p>Group interview (GI) – indirect participants – personal phone use</p> <p>GI – relationship with teachers</p> <p>GI – phone use from the school</p> <p>GI - phone use in the school</p> <p>GI – general use of phone</p> <p>VITE EVENTS</p> <p>Class Whatsapp chat group</p> <p>Electricity cut off</p> <p>The day that phones were banned from physical education class</p> <p>Class email</p> <p>Listening to music in the school</p> <p>Absence, being late, or being picked up</p> <p>“18” preparation (National Celebrations)</p> <p>Tasks of dividing papers in group interview</p> <p>Issue about not bringing textbooks for class</p> <p>School research project in Biology</p> <p>Language project – film review</p> <p>Language project – video recitation</p> <p>Teachers' phone use</p>	<p>ALFREDO</p> <p>Changes between before and after his school absence</p> <p>Apathy in attending school – disconnection</p> <p>Group of friends</p> <p>Going to Uni – studies – summer course in University of Chile</p> <p>CONSTANZA</p> <p>Group of friends</p> <p>Hobbies – fangirl</p> <p>Leadership – participative – understanding</p> <p>“Bad student”</p> <p>Scout</p> <p>ROSA-MARIA</p> <p>Good student</p> <p>Self-perception</p> <p>Recording of her summary in English [class]</p> <p>Group of friends – interests</p> <p>Hobbies – fangirl</p> <p>Interaction with people outside school - technologies</p> <p>SIMONA</p> <p>Low use of phone in the school</p> <p>Change in her group of friends</p> <p>Playing [video] games</p> <p>Relationship with her mum</p> <p>Class treasurer</p> <p>Shy, worried to fulfill her duties</p>
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After the Nvivo coding was finished, mainly because of the amount of data, the codes ended up being more like themes or “common ideas” that encapsulated various codes (Cresswell, 2013). For this reason, an internal coding process was required. However, this procedure was not applied to all the codes, but only to those essential for answering the research questions. The internal coding was performed by hand with a printed copy of all the references in the selected codes. This process was conducted together with memoing (Birks et al., 2008), which included my reflections on the data, as

well as the start of the writing of my findings. Examples of internal coding and memoing can be found in Appendix K. The internal coding and memoing process led to the structure of some sections in the findings, as well as to the selection of quotes for the document.

4.5.2.4. Narrative analysis

Based on the observational data condensation and interview coding, findings around how mobile phones were seen and dealt with in school and classroom were taking shape. However, the level of direct participants –the individual level- was not showing sufficiently. Narrative-based analysis (Riessman, 2016; 2008) was brought in to understand how direct participants were orchestrating positionalities in the school setting while using their mobile phones. Narrative analysis is characterised by its focus on a “case” (the individual) and a sequence of events (Riessman, 2016; Cresswell, 2013).

This approach inspired me to use observational data to generate what I call “narrative composites” of a typical day at school for each direct participant. Figure 4.9. shows an excerpt of one narrative composite for Mario (Alte school). Using each class timetable (Appendix N), I produced a grid with all the modules and breaks of a “typical day” that was then filled with observational data: some contextual information about the class or break and then a portrayal of what the direct participant was doing. Therefore, some data were not included when they were not connected to the relevant person. Two complete narrative composites for other direct participants can be found in Appendix L. Narrative composites were produced for all eight direct participants, however, only five were used in answering the third research question. This is explained in the following section.

Figure 4.9.: Excerpt of a narrative composite, Mario, Alte school.

<p>VI. 13.15 – 14.10 Lunch Break</p>	<p>Classroom and outside.</p> <p>Mario is very active. I ask him where he is having lunch, he replies: “where my friends are”. I follow him. He goes upstairs to the other Year-11 class’ classroom. There, he meets a friend [I think is V.]. Some of his classmates are also there. When Mario enters that classroom, his classmates leave the room. Mario stays with V. They check something on their phones while chatting.</p> <p>After a while, Mario and V. go downstairs to Mario’s classroom. They stay for a while and then they go out again [no time for me to follow them]. Then come back to the classroom with a deflated ball. They and other students start kicking this ball inside the classroom. Mario leaves the classroom again. He hasn’t had any lunch.</p>
<p>VII. 14.10 – 14.55 Tutor time</p>	<p>Teacher gives Agustina and Mario several minutes to present and discuss important issues for the class. The teacher also in between talks about other important issues.</p> <p>Firstly, Mario and Agustina give a presentation on the <i>tombola</i> (lottery) system to select the new kindergarten students. This is a new selection system in the Chilean education system and all the community, including students can come and see the selection process.</p> <p>Then, the teacher takes some time to talk about an incident that happened in the lunch break. Mario and Agustina stay quiet. This took like 15 minutes. Afterwards, Agustina and Mario remind their classmates about their school trip to LV, and that they need permission from their parents to go. After this, the teacher talks about the support that the class football team needs in order to win the school championship.</p>

4.5.2.5. Writing-up

Interpreting data while writing up the findings was the final stage of analysis (Restrepo, 2016; Creswell, 2013). The findings chapters were organised based on the research questions, data analysis and theoretical concepts (table 4.12.) which point out to three different levels of negotiation in students' mobile phone use: school, classroom, and individual. Writing the findings chapters was an iterative process, bringing themes, events, quotes, and portraits from different sources and stages of the analysis process. This caused certain sources or parts of the analysis to be more frequently used than others depending on the questions, as shown here:

Table 4.12.: Key elements of the process of writing up findings

Research questions	What elements in the school world are constraining or enabling teenagers' mobile phone use?	How are teenagers negotiating their use of mobile phones in classes with teachers?	How are teenagers orchestrating different positionalities in the use of mobile phones in the school?
Level	School	Classroom	Individual
Chapter	5	6	7
Main sources of data	Head teachers and class teachers' interviews Observational Data	Students individual and group interviews Observational Data (classes)	Students individual and group interviews Observational Data
Main data analysis methods	Observational Condensation Interview Coding	Observational Condensation Interview coding	Narrative composites Interview coding (individual codes)
Theoretical concepts	Cultural world of school and mobile phone use	Cultural worlds in the use of mobile phones Positional identities (teachers, students) Mobilities	Positional identities (Students, teenagers, daughters/sons) Mobilities

It is important to mention that all the analyses (and data collection) were conducted in Spanish, except for the narrative composites and writing-up. This was done to maximise the interpretation and co-construction of meaning, practices, and perceptions with all participants (Van Nes, Abma, Jonsson, & Deeg, 2010). Ethnographic portraits, observational grids, and quotes were only translated once there were selected to be part of this document. The translation of interview quotes posed extra challenges because of the presence of slang, idioms, and context-based vocabulary, mainly coming from students. I decided that when an expression or word was typical and/or representative of youth jargon or Chilean school culture, I would leave it in italics and include an English translation in brackets (see translation protocol in Appendix J).

In the process of writing chapter 7, three individual cases were not considered: Constanza (Vite school), Alfredo (Vite school), and Agustina (Alte school). In Constanza's case, the decision was based mainly on the repetition of information as she was part of the same group of friends as other direct participants in her class (Simona and Rosa-Maria). Alfredo and Agustina's cases were excluded because

of ethical issues. In both cases, during my time with them, contingencies and personal problems took place. The writing up of their individual cases would have exposed some private aspects of their lives that in my opinion were unethical to share. The three unselected direct participants, however, were considered throughout the analysis and included in other findings chapters.

As “all writing is *positioned* and within a stance” (Creswell, 2013:215), it is important to mention that my writing style, especially in chapter 7, had some ethnographic traits, such as being descriptive, rich in details and examples, and giving space to diverse voices around the phenomenon under study (Restrepo, 2016). However, I do not make myself present in the text as much. This decision was based on two aspects. On the one hand, I wanted to highlight the phone use, their users, and connected elements. On the other hand, I opted to prioritise a way of writing that would not be hindered content-wise by the fact that I am a non-native English speaker. Thus, side-lining myself is in no way a pretension to be objective, but the result of subjective decisions and limitations, as well as the product of my relationship with participants in the field and with data after fieldwork.

4.6. Ethical considerations

The following section presents the main ethical issues considered in the study: informed consents, researcher’s positionality and presence, rapport with participants, and confidentiality and privacy. The section also works as a window into some fieldwork practicalities and contingencies.

The identification of these issues was informed by the reading of specialised literature on research with children and young people (e.g. Graham, Powell, & Taylor, 2015; Hemmings, 2009; Heath et al., 2007; Emond, 2005; Hill, 2005). Additionally, the British ethical guidelines for educational research (BERA, 2011) and Chilean ethical suggestions on informed consents (FONDECYT, nd) and confidentiality (FONDECYT, 2011) were considered. Within the Chilean context, no official ethical guidelines for educational research or research with children and young people were found.

This study was approved by the University of Bristol ethics board before data collection (Appendix M), ensuring voluntary participation, right to withdrawal and confidentiality, and anonymity, to name some of the key criteria met. Regarding data protection, data collected were stored in a secure and encrypted online folder or, in case of being printed, in a secure and personal locker.

4.6.1. Informed consents

It has been well established that informed consents from guardians are essential to ensure compliance of ethical procedures when researching with under-aged participants (Heath et al., 2007). In this study, I also asked for participants' consent based on a *presumption of competence* (France, 2004) that can be applied when a participant is at least 15 years old (Hill, 2005). Thus, the following participants were required to sign informed consents (Appendix F): direct participants and their parents for their whole participation in the study; indirect participants due to their involvement in observations; indirect participants involved in group interviews; indirect participants involved in online dialogues selected by direct participants; and interviewed head teachers and class teachers. School administrators and teachers, in this regard, were only considered to be gatekeepers and possible interviewees. All informed consents provided rights to confidentiality, anonymity, and withdrawal.

I saw the participants' informed consent not only as a way to protect and safeguard their rights, but also as an extension of their right to take decisions by themselves in relation to any research stage (Homan, 1991). This perspective informed the decision to make the direct participants hand their parents' informed consent and get it back to me (section 4.3.2.2.), as well as make them ask the people involved in online dialogues for consent (section 4.4.2.2.). It also informed the decision of making indirect participants to hand their parents a letter with information about the project (Appendix F.4.). I considered that the parents' meeting (section 4.3.2.2.) had given me the opportunity to inform them directly.

I also saw students' and adults' informed consent as an opportunity to discuss this document and to know more about their motivation and expectations connected to their participation (Emond, 2005). Therefore, in the case of participants, head teachers, and class teachers, once I handed them the informed consent, I gave them the opportunity to discuss it face to face with me and solve any doubts they had. In the case of parents, apart from the parents' meeting, through their informed consents and information letters (Appendix F), I offered them the chance to meet or get in contact with me by phone to solve doubts. None of the direct or indirect participants' parents got in contact with me to find out more about the project.

Finally, all participants accepted to be part of the study, except from one indirect participant in each class, who did not return the informed consent after a couple of attempts to ask for it. Those two students engaged in informal conversations, but not in any other activities and were not considered in the data analysis.

4.6.2. Researcher's positionality and presence

Throughout the whole study, I was more than just a researcher.

Firstly, I was a “PhD student”. I think the *PhD* part was important to engage with class teachers and head teachers. Some of them wanted to hear my opinion of the school or Chilean education, and I received congratulations for researching this topic. From students, I think the *student* part was more relevant, particularly the fact that I needed data for my dissertation. This situation caused students to show a *helper attitude* (Emond, 2005). For example, in the interviews on online dialogues, it was common for students to check with me if what they selected was what I was looking for or whether it will serve for my research. Similarly, in the coordination of group interviews, some students encouraged their friends to participate saying things like “we have to help her” or asking me if the interview was okay when it was finished.

“This is an art Project, I don’t know if this is okay [for you]” (Antonia, interview dialogues, Alte school)

The *helper attitude* is also related to another positionality: the adult, based on the inevitable existence of a power imbalance between adults and young people (France, 2004; Valentine, 1999). This power imbalance has its roots in age difference, competences, and social roles (Hill, 2005). Participants’ insistence on checking that what they were doing was okay showed me that they were used to receiving feedback or even approval regarding their own opinions. They somehow assumed that the interviews were tests, while I encouraged them not to think of the process like that at all. I mentioned countless times that this was all about their daily life and their own opinions. For example, during the coordination of group interviews, some students did not seem to understand that I was asking them to tell me when it would be a good time to conduct the group interview (the following day or week). It was like they were not used to negotiating their schedules with an adult, which could relate to them being used to a school culture of compliance with adults’ requests (Powell, Fitzgerald, Taylor, & Graham, 2012).

Thus, power imbalance was inevitable. Using the language of participants has been reported to be a good way to minimise power imbalance (Temple & Young, 2004) and develop rapport with them (Marschan-Piekkari & Reis, 2004). In this respect, I used some strategies. The idea was to behave like a *non-authoritarian adult* or *least adult role* (Kirk, 2007). Thus, for example, I encouraged them to talk in the interviews. That sometimes involved pretending I did not know how certain social media apps work, or saying I had never heard about a movie they mentioned; on other occasions, however, I genuinely did not know, and I tried to engaged with what they were saying. Another strategy was that I decided that I would not wear formal clothes. So, every time I visited the schools, I wore jeans, flat

shoes or trainers, a t-shirt, an informal jacket, and no make-up. I was also carrying a backpack instead of a cross-body bag or purse. Additionally, I avoided spending time alone with teachers, particularly at the beginning of fieldwork. I was invited several times to join teachers in the teachers' room or to have lunch with them when I was killing time, but I never accepted. I preferred students to see me "doing nothing" in the yard instead of hanging out with teachers. At the beginning, this was key to avoid being associated with part of the staff. For the same reason, I also decided to address teachers using the words *profe* (short version of *teacher*) and *usted* (formal *you*) when in the classroom and in front of the students. When there was no student around, I used *tú* (informal *you*) and their given names, the same way they were addressing me the whole time.

In Vite, students called me "miss" (in English) and *usted* because that was the way they addressed female teachers. However, at the end of phase 2 of fieldwork, some students started using my given name and *tú*. In Alte, there was always a mix between my name/*tú*, *tía*¹³/*usted*, and "miss"/*usted*. I think this showed that I was in in-between waters, but I managed to be regarded as someone not entirely connected to the school staff. Some students in both schools asked me how I wanted to be addressed. I told them to use the terms they felt comfortable with.

Finally, I was also reminded of my gender. Being a female researcher, I believe facilitated access with gatekeepers (schools and parents). In this regard, Coad et al. (2014) suggest that male researchers can encounter extra obstacles when requesting permission to interview children. They argue this is related to stereotyped conceptions of women as children's caregivers and men researching children as suspicious. With students, I was reminded of my gender at Vite school when I presented the project and invited them to participate (section 4.3.2.2.). This class, I later realised, was very gender-biased: boys sat on one side of the room and girls on the other; boys were very noticeable and loud, while girls were quieter and better behaved. When I presented the project, I felt challenged by some male students asking me what they would get in return for their participation. When I checked their responses in the questionnaire (Appendix G), I found that only one boy was willing to participate in the project. In a very advanced stage of fieldwork, I learned that this was a trick played by his friends. When completing the questionnaire, they told this participant that they were all answering "yes" to that question, so he did the same. The truth was that none of them did. I tried to convince a few of them later face-to-face, but to no avail. Fortunately, the boys of the class agreed to be indirect participants and some of them participated in one of the group interviews.

¹³ *Tía* means *aunt*, but it is a common way to call female adults who are not relatives.

My presence in the school inevitably had an impact on students' and teachers' behaviours during observations (Matthews & Ross, 2010). Some students in informal conversations and interviews mentioned a few times that their classmates were behaving better when I was with them at school, or that teachers were telling them off less about disruptions and mobile phone use. I knew that this could be the case before entering the field. After being in the field for a while, I saw changes in students' and teachers' behaviours. They looked more relaxed and students goofed around more in my presence.

In classes, my presence also became evident sometimes. In some classes, teachers referred to me. For example, the Chemistry teacher at Vite and the Orientation teacher at Alte more than once used my presence to tell off students: "Don't you see that we have a guest?" "What is Paulina going to think of you?". Only in one class in Vite (Language), a teacher included me as part of his class, making me read out loud a part of a play he and the students were reading. During individual or group work in classes, students often asked me for help with questions or activities. In English classes, this was more common, especially when they wanted to translate words into Spanish. I helped students only in the latter situations.

4.6.3. Rapport with students and school professionals

One of the most important things in the study was to generate a good rapport and trust with my participants. Apart from the strategies related to positionality and informed consents to ensure this bond, I also strove to keep students informed of key instances during fieldwork, such as the end of observations and the end of fieldwork. However, during the first two or three weeks of fieldwork, teachers and students were asking me what I was doing and what I was taking notes about. It took some weeks for everybody in the school to get used to my routines and presence. I went from announcing my arrival in reception and waiting for my contact person to come for me, and then introducing myself to each new teacher I saw, to just saying hello to the receptionist, passing through the school door, and then knocking on the classroom door and seeing the teachers waving for me to come in. In addition, I went from sending my weekly plan to my contact person in each school to not doing it at all. I realised that nobody was tracking what I was doing and teachers saw my presence in a positive light, so I decided to start planning just with students.

Fieldwork in both schools ended with some activities that showed the positive rapport we built with students and school professionals. At Alte, students organised a surprise *convivencia* (a social where everyone brings something to eat or drink) for the last day I went to school. As requested by the head

teacher, I also organised a teachers' workshop to show them how to use an online platform called *Padlet* for their classes. I received positive feedback. At Vite, rapport was also positive. My contact person requested a preliminary findings report that could help them take decisions on digital technology use in the school. Additionally, the last day I went to see the students and class teacher, I brought some sweets to share and we spent some social time together.

In terms of trust and rapport with students, I would say the experience was very good. Extra data collected during fieldwork with direct participants, in part related to personal, family, and romantic stuff, showed the trustful bond we created. Overall, I can say that I had no problem trusting anyone in the classes except for one case that ended up in withdrawal. In Vite, at some point I was working with five direct participants. This person changed her attitude during fieldwork. A couple of times, I arrived to do an interview or observations, but she was avoiding me. I started thinking that maybe she just wanted to skip classes, which is very common among teenagers (and participants in this study), but not in a way that I felt comfortable with. I felt our rapport was broken. I decided to tell her that was it. She took it well, I believe, because she just said "okay".

Another aspect of my rapport with students concerned online communication with them for coordination. The Pilot Study (section 4.3.1.) showed that Whatsapp would be the best way to communicate with them when face-to-face contact was not possible. Some research on young people's use of digital technologies shows that it is important for the researcher to think through whether to be friends on social networks or share mobile numbers with participants since it can break the boundaries between personal and private life (Pascoe, 2012). Based on this, I asked direct participants for their phone numbers on our first meeting (section 4.3.2.2) only to coordinate our work through WhatsApp. I, however, always prioritised coordinating with them face-to-face and at school. During fieldwork, I was mostly the one initiating communication online to confirm activities we had planned beforehand or to inform participants about changes of plans. Throughout the study, I did not have any problems regarding online communication. However, in the future, I would add this aspect to parents' and participants' informed consents. This reflection came from the fact that my online interactions with participants were taking place out of the sight of their teachers and guardians. If any participants had complained about the way I was contacting them, or if I had a problem with a participant, it would have been beneficial to ensure that parents were aware of our online communication.

4.6.4. Confidentiality and privacy

This study followed Hill's (2005) recommendation about guaranteeing three different kinds of confidentiality. Public Confidentiality was achieved by using fictional names or pseudonyms for the schools, adults, and young people participating in the study. Social Network Confidentiality and Protection from Third-party Breaches of Privacy were ensured by not passing on or revealing information to any family members, school actors, or other persons who knew the participants, including class teachers and head teachers. Regarding this, I was careful because I gave participants a lot of space to tell me things not wholly related to the research questions. For teenagers, this is more sensitive as they are more susceptible to share more intimate things, be more secretive, feel more exposed, or experience mood changes (Hemmings, 2009).

In general, I think the participants felt comfortable during the interviews. It was common for them to tell me things that they were not supposed to say about texting in classes, or even cheating.

[Talking about somebody who revealed some cheating techniques in the class]
M1: but at some point, I said "I cheat shamelessly and /he/ didn't mention me, so he must like me"
W1: yes. Same here, it was like I exchange exams with V, haha, and he didn't say...
M2: but the other day we checked the exam.
W2: ohhh, I remembered how the pages flew over.
W1: hahaha.
(Group interview, mixed, Alte school).

Legend: Transcription protocol in Appendix J. Regarding participants involved in the group interview, W or w stands for "woman" plus a number (identifier).

There were moments during interviews when participants were concerned about the things they were about to say. They checked with me if the interview was confidential or lowered their voices to say certain things. I had no experience of participants asking me explicitly not to tell something to somebody, but this was our implicit deal.

Regarding certain events or topics, if I wanted to follow their lead or check with other participants, I had to use some strategies to maintain confidentiality. During interviews or informal conversations, I used the expressions "I heard that..." "I was told that...", or even pretending not to know about something when the participants brought in a topic I was interested in. Thus, I avoided identifying who said something to me or specifying whether I observed or heard about it.

Overall, ethical issues were considered carefully before data collection, but unforeseen situations emerged, which is especially common in research with teenagers (Graham et al., 2015; Hemmings, 2009). Personally, I am pleased with the rapport I built with young people and adults participating in

my research, which not only provides credibility to this study (Cohen et al., 2007), but also makes it a window into a piece of the daily life of teenagers and their teachers in school.

4.7. Chapter summary

An ethnographic methodological approach was used in this study. This positioned myself within the context of study, the school setting, and put me in daily contact with the social actors –students, teachers and headteachers– involved in students’ use of mobile phones. The ethnographic approach taken allowed flexibility in the design, interconnection of methods, student participation in the data collection and analysis phases during fieldwork, and access to daily offline and online mobile phone use. These characteristics served as means to bring in a novel connected and relational approach to my examination of students’ phone use within the school.

In terms of research design, fieldwork took place for three months in two schools in Santiago, Chile. During that time, I spent time and worked with two Year-11 classes (one in each school), and more directly with a total of eight students who became direct participants. Participant observations were conducted in classes and in breaks with a focus on the whole class group and direct participants during the first phase of data collection (around one month and a half). During that same phase, interconnected individual interviews were conducted with direct participants to learn more about their digital practices with mobile phones and their perceptions of schooling. In the second phase of the study, group interviews were conducted with direct participants and other students in the class to better understand their observed phone use, and individual final interviews with direct participants to discuss some preliminary findings. Throughout fieldwork, interviews with head teachers and class teachers were also conducted to delve into school regulations, negotiations, and students’ mobile phone use.

Data coming from the different methods were connected all over fieldwork and, in that way, data analysis started in that phase with the help of students. After fieldwork, operating from a perspective of qualitative analysis as a holistic, iterative, and inductive process, and incorporating the components of events and themes, the aim of the analysis was to show the negotiation of students’ mobile phone use at three levels –school, classroom, and individual– in order to answer the research questions. Using event, thematic, and narrative analysis, it was possible to identify elements connected to students’ phone use in the school, better understand the negotiation process undertaken by students in classes with teachers, and explore how individual students are finding ways of using their phones in connection to their positionalities as young people and students.

Finally, ethical principles in (ethnographic) research with teenagers were taken into consideration and helped me guide the research process and sort out contingencies. Rapport with participants was a key element in the way this study was conducted. Regardless of the power imbalance between the researcher/adult/female/PhD student and students/teenagers/gender-mixed peer-groups, the bond constructed made it possible to give rigorousness to the data collection and analysis processes and solve emerging issues.

Chapter 5: The school world and everyday use of mobile phones

This chapter addresses the first research question: What elements in the school world are constraining or enabling teenagers' mobile phone use? In doing so, the findings provide the context in which the participants' mobile phone use¹⁴ is located. It is assumed (Chapter 3), as this chapter will illustrate, that the practice of mobile phone use is a point of connection of people, positions, other practices, and perceptions in the overlap of worlds of school and everyday life.

The chapter focuses on school events and perceptions of teachers and head teachers about the world of school around and in connection to participants' everyday phone use. Some accounts coming from the participants are incorporated in this chapter, however, a more detailed account of their practices with and perceptions on phones will be presented in the following chapters.

5.1. The “uncontrollable” technological lives of teenagers at school

Participants in this study attend two schools: Vite and Alte schools (Figure 5.1).

Figure 5.1.: Schools' yards. Vite school on the left, Alte school on the right.



Sources: taken by the researcher with consent of schools' authorities.

¹⁴ As explained in section 4.2., the term *participants* will be used to refer to Year-11 students participating in this study. However, the term *students* will be the most commonly used in the findings chapters. With this, I do not want to dismiss the overlap of positionalities they are experiencing in school, but to locate them within the site of the study, namely the school.

Participants are teenagers with high levels of access and use of digital technologies in their daily life (table 5.1.). As discussed in the fieldwork, the device they use the most on a daily basis is their mobile phones. Tablets, computers, and laptops are more commonly used when playing video games at home. In the case of homework, students prefer having a bigger screen to work, but they prefer to use their mobile phones because it is quicker and more efficient sometimes.

Table 5.1.: Technology access and use by participants in each class.

		Vite class	Alte class
Ownership of digital technologies for personal use	Computer	13	7
	Laptop	25	25
	Tablet	13	15
	Smartphone*	30**	30**
Internet at home		25	30
Frequency of students' Internet use through mobile phones (wifi or plan)	Every day (2 or more hours)	24	27
	Every day (less than 2 hours)	2	4
	3 or more days a week	2	0
	1 or 2 days a week	0	0
	Some days a month	0	0
	Never	0	0

Source: students' questionnaire (Appendix G). Vite class, n= 28; Alte class, n= 31

*Mobile phones capable of connecting to the Internet, regardless if students have a plan or not.

**Using total number of students in the class (Vite class= 30; Alte class= 32), adjusted with observational data. In Alte, one student had a traditional phone and other student had an Ipad (with possibility to access wireless Internet).

School staff are aware of the *media ecology* (Ito et al., 2010) their students live in and their intensive use of technologies and exposure to media content. They raise issues regarding the new ways their students are dealing with and processing information, new routines that are changing for them –such as sleep patterns–, and the ways online communication is replacing face-to-face communication outside school hours. Additionally, they are aware of the new challenges this scenario poses in terms of curricular incorporation of new technologies and the maintenance of motivation and discipline in classes.¹⁵

/Technology/ is a useful tool that strengthens and pleases the *chiquillos* (students). We cannot avoid society; society is based on Internet and social networks. (Biology teacher, Vite school)

¹⁵ Transcription and translation protocols are in Appendix J.

Regarding the participants' phone use in both schools, it does not go unnoticed. It is visible and visibly unsolved in terms of having a common perspective and –in some cases– ground for action. Regardless the differences in the official phone regulations (section 4.3.2.1.)¹⁶, teachers and authorities in both schools see phone use as something “uncontrollable”.

Mobile phones should be in students' bags, not even in the school. According to the regulations, their use is not allowed inside the school, I mean the <i>inspectors</i> (Behaviour department members), the teachers could demand that even in the yard shouldn't be used, but it's a thing so uncontrollable that in the yard it is allowed... (English teacher, Vite school)
The mobile phone phenomenon burst strongly, all the children had mobile phones at some point and it became a problem.... (Head teacher, Alte school)

“Uncontrollable” phone use does not mean –from the perspective of authorities and teachers– that nothing can be done. However, it is a phenomenon that appeared without warning and is now part of the school landscape and needs to be problematised. They do not see the point in trying to make it disappear. They have focused their efforts on dealing with it in a way that allows pedagogical work to continue as expected: disciplined classes with engaged and participative students.

The reflection on how to deal with this situation has been similar in both schools. For head teachers and teachers, the most predominant concern has been how to control the use of this technology: how to make sure that students are not misusing it. This misuse includes: cheating; contacting parents or friends in school hours; and publishing personal information about students and teachers online. It is not something that is out of control, but it has led teachers and administrators to reflect and re-define regulations over the years.

The regulations started banning it because, firstly because of a lack of knowledge; secondly because of students' misuse, we became aware of how /phones/ were being misused and that we needed to educate students regarding them. Any examples that you could give me of something that has happened? Sending test answers, asking classmates outside [school] for help, calling parents making up excuses of things that didn't happen. (Biology teacher, Vite school)
No, the device is not a problem in itself, we do have to strengthen the use of social networks, being responsible, safe, we have to work on this more. The kids most of the time aren't aware of what are they exposed to. But I imagine you have had problems (...)? Of course, a meme was made of a teacher and this triggered these measures in a year 7 class. In that same class, we had the case of a mass cheating through Whatsapp. That was last year and led us to take decisions. (Head teacher, Alte school)

¹⁶ In Vite school, authorities and teachers were deciding on mobile phone regulations during fieldwork. In Alte school, they came to an agreement that completely forbids mobile phones until year 7 and allows their use only on breaks from Year 8.

However, for the interviewees, the idea of completely forbidding phones is impractical because there are interwoven opinions and concerns coming from different sources. Firstly, some teachers claim that they are giving it a curricular use in their classes. Secondly, many parents want their children to bring their mobile phones to school in case of emergencies, while others want mobile phones to be totally forbidden or the school being responsible for what happens in school hours. And finally, as mentioned before –and this will become clearer in the next chapter– students are using their phones daily regardless of school regulations.

It is not clear yet, a decision has not been taken yet. Administration wants to ban mobile phones, leave them outside, but you can't leave children without a way to communicate during school hours, because it could happen that the kid may need to communicate with her dad or that the teacher may use it in classes, but we need to specify what the limits are and that is still pending. (ICT coordinator, Vite school).

...the *apoderados* (parents) resist the mobile ban because they say "I need to communicate with my kid", and the kid can't use it in school hours, and therefore, it is not an open way of communication. Then we were facing a problem that we can't eradicate. (Head teacher, Alte school)

In the case of Vite school –where mobile phone regulations are being discussed–, it is possible to see some extra concerns at play. Administration is pressuring teachers to be stricter with this matter, while at the same time there are diverse opinions among staff. There is a general agreement about the importance of restraining the use of mobile phones. However, some authorities and teachers think that it makes students calmer and more engaged, while other teachers think it is important to go through this phase of debate around phone use to learn how to deal with it.

I see the kids with these things and this is forbidden in the school regulations, but... during lunch, the *orientadora* (Pastoral department member), who is there, told me yesterday: "You know, with these things [phones] the children are quieter" (...) I could have settled the matter yesterday, "I have the last word", but I asked them [staff], "Show me ways to do it" ... (Head teacher, Vite school)

And in the school, what kinds of discussions have you had on mobile phones?

We have had some discussions because Administration sometimes thinks that we aren't regulating phone use very well, so we have debated because the old school staff thinks that there are students who trick us, that we are too naïve, and there is a group who says that we have to teach them anyway, and that is the only way, even if they trick us. (Biology teacher, Vite school)

In contrast, because of the negotiated regulations in Alte School, teachers share the idea that the boundaries among actors and their responsibilities are more clearly defined. For teachers and the head teacher, it has been a good measure because it has allowed parents and students to be accountable for their participation in the use of mobile phones.

"...because for the little ones, the use of mobile phones is forbidden and they shouldn't even bring them to school, so the agreement is that if a parent needs that, her kid comes with his mobile phone, okay, but if there is any problem with the texting, they cannot come to complain to the school, because in a strict sense they shouldn't come to school with them". (Biology teacher, Alte school).

Thus, schools are not just dealing with their students' phone use, but finding agreement in the school community as a whole, especially among teachers and administrators. In the end, regardless on the different stages and regulations in each school, the situation is quite similar: a constant and widespread use of mobile phones during classes and breaks, especially in the upper levels like Year 11. The following sections will explore in more detail the context of the intensive use of mobile phones, identifying factors associated with it. The idea is to portray how the schools studied are dealing with mobile phone use from an institutional perspective and beyond official regulations. In other words, how schools and especially teachers are improvising around this topic. Some student perceptions will be added, although their practices and points of view will be addressed in more detail in the following chapters.

5.2. Students' mobile phones as an option for teachers' practice

Authorities and teachers report that the use of digital technologies in classes is important because of the daily engagement their students have with technologies. However, in both schools, curricular technology use in Year 11 is very low. According to the interviewees, there is a lack of sufficient and appropriate devices at school. Although both schools are part of the *Enlaces* programme –National Educational Technology programme (see footnote 1, chapter 1)– and have some private budget to maintain a computer lab and projectors, there is limited access to them.

In Vite, the low curricular use of technological equipment has to do with the poor conditions of the computer lab and the small number of projectors for the whole school (n=3). Over the years, financial constraints have hindered the possibility of updating the equipment, and at the time of the study computers and Internet access in the computer lab are subpar: there are mice missing, computers that do not support recent software (such as Prezi), and limited Internet access that does not allow students to perform web searches. Thus, the computer lab is mostly used as a regular classroom for the optional courses the oldest students take (Year 12 and 13).

The Art teacher tried to teach Prezi to a group of 30 children and she couldn't, because the network was incapable of dealing with 30 computers, so in practice we don't have good resources. (ICT coordinator, Vite school).

In Alte school, the technological conditions and equipment are better, however, as in Vite school, curricular use in the upper levels (from year 8) is very low. In Alte school, the head teacher recalls that around 6 years ago it was mandatory to use the computer lab for teaching once a week, and there was considerable investment in educational platforms, such as Moodle. However, in that process they

realised that they needed maintenance and teacher training. They slowly decided to prioritise what worked better for them, which is basically the use of projectors and Power Point. Additionally, in this school, the computer lab is most of the time not available for the upper levels. Thus, as in Vite school, Internet access and equipment do not allow students to work the way some teachers would like to. For example, the Biology teacher argues that some of the software she needs does not run on the school's computers and the English teacher would like to have a computer and earphones for each student.

The Internet works poorly. You connect the computers and every 10 minutes the system is crashing, you have to reboot the router. (Chemistry teacher, Alte school)

...I would have liked to use two computer programs, but no, you can't... I would have been able work with them [students] if there was a computer per student (...) /the computer lab/ is always busy and moreover, for example, I have noticed that when everyone's online, everything becomes slower, or it works for some and nor for others, so it doesn't work for me. (English teacher, Alte school)

Thus, in this context marked by limitations in the use of digital technologies, particularly access to the computer lab, most teachers rely in some way or another on the presence of mobile phones in the classroom. More detail on this will be presented in the following chapter, but for now it is important to mention that the lack of Internet access in the classroom, and the fact that almost all students can access the net on their mobile phones, has made some teachers use them in their classes. In most cases, phones are used in very concrete activities, given their calculator and dictionary functions, or to perform web searches; nevertheless, these uses are limited.

For example, sometimes the equipment you need to work on something, let me give you an example: we were working on the analysis of a film and we did not have access to the file [the film], but the kids were able do it on their phones. (Language teacher, Vite school)

W1: For example, teacher F [language teacher] always in activities, text-based ones...

W2: I don't know, for example, looking for bibliography, so he lets us use the phone to look things up on the Internet.

W3: "biography of this /person/", is like he says, "the activity, you can use the phone" (...)

W2: I mean, also in English we also use it as a translator or things like that.

(Group interview, girls, Alte school)

Among some teachers, this decision to accept phones for educational purposes also has to do with the importance they give to students working with digital technologies in general.

What happens is that we, the teachers, we have discussed this norm and we have said that sometimes it is super important that the youngsters use the technology, even for what we said earlier: to read a text, some /students/ take pictures of mathematics exercises.... (History teacher, Vite school)

A research project led by the Vite school Biology teacher is an example that combines a teacher's desire to make students work with digital technologies and improvisation based on the presence of mobile phones. This is the only example of this kind found during fieldwork. For a unit on contraceptive techniques, this teacher allowed Year-11 students to bring laptops, tablets, and mobile phones to look for information and work on their group presentations in the classroom. Ideally, they should bring their own laptops and tablets, partly because, as the teacher reports, it allows her to pay closer attention to what the students are doing. However, some students had neither or had devices in poor condition, so they could use their mobile phones (cf. table 5.1.). Moreover, Internet access is not available for students' work in the classroom, so at least one student from each group uses his/her mobile Internet connection. The teacher also mentions that sometimes she has shared her Internet connection with them.

We are finishing [the project]. They [the students] have to create a Power Point presentation or they can make posters, leaflets, or questionnaires (...), but all the design needs to be done on their laptops, phones, or tablets. They have had total freedom. (...)

And do they have to choose a topic?

I gave them the topics, I divide them in ten groups, three /students/ in each, and we have been looking /for information/ in classes, we have been selecting information and they show it to me, they watch videos, debates. They have look for many things. (...)

How they have been reflecting?

Very well. They work very well with this /system/. They like it a lot. I seldom have to tell them off (...)

(Biology teacher, Vite school)

This event shows a variety of elements related to teachers' decisions to incorporate students' mobile phones. For example, financial constraints and possibly a lack of institutional support in equipping classrooms with Internet access when the computer lab is not available. This could also be related to a mismatch between schools' and teachers' expectations in terms of educational technology use and equipment available, which causes students to end up using their personal devices. This creates a *no man's land* regarding who pays and who is accountable for this Internet use, although neither teachers nor students explicitly report this as a problem. Overall, technological constraints in both schools, the importance teachers attach to their students' daily technology use, and the usefulness of technologies for their own classes, make teachers receptive to mobile phone use in both schools.

5.3. Dealing with the everyday use of mobile phones in school

Together with teacher interest of and “pressure” for them to incorporate mobile phones in their classes, both schools are also concerned about controlling its use to avoid distractions, annoyances to other people, and online bullying against students and teachers. The latter two are less common among students but are the ones that have resulted in more pressure to modify school regulations. In both classes, participants admit there have been complicated situations in the schools and among classmates regarding misuse of mobile phones and online platforms. These mainly include the publication of photos or memes of teachers and students or the creation of social media accounts to share private and/or derogatory information about people in the school.

The way each school has dealt with misuse has been mainly through controlling. However, in Alte school, probably because of their longer process reflecting and acting upon the use of mobile phones, there is also an educational approach related to developing awareness and skills to deal with online risks. For example, in the play area, particularly in the area for younger students, there are signs on the wall with recommendations for safe Internet use. Also, a unit on the responsible use of social media is included in Orientation classes for older students (from Year 8 until Year 11). In Vite school, by contrast, there are no comparable programmes. The way staff deals with the issues is based on controlling and “putting out fires”.

Despite the differences between their approaches, in both schools there are situations that come up and need to be taken care of without clear guidelines. At the moment of the study, the educational approach in Alte was pretty new, and in Vite was just an idea to incorporate into the decision-making process of school regulations. In order to understand ways of controlling and educating, and what students of Year 11 think about the ways of dealing with their misuse of digital technologies, I will draw on two events that took place in Alte school, and one from Vite school.

5.3.1. *Juampa Juampito* – Alte school

The first event is called *Juampa Juampito*, based on the name of a character that –allegedly– one of the students in Year 11 in Alte school created to tease classmates online and divulge private information. This took place over 2014, in Year 10. This person created a Facebook account to troll and tease students from the school. Then, in the second semester, *Juampa Juampito* sent an email to the *Inspector General* (Head of Behaviour Department) and some teachers. There, he described in full detail how people in her class cheated during exams: who did it with whom, and techniques used.

This situation triggered a series of repercussions. Students described how this was a big problem for them, not too much because all their techniques were disclosed, but because teachers and specifically one member of staff treated them very badly. In their words, the school was concerned about the fact that they were cheating in exams, but not worried about someone creating a fake email account and revealing personal information.

W1: so, the teachers were upset because we were cheating, and we were upset because...

W2: [interrupting] ... the teachers were not paying attention to the rest.

W1: to the rest, only that we were cheating.

Ok, and you, your concern was that was somebody...

W1: ...yes, lurking.

NNm: it was wrong.

W2: and moreover, it was an anonymous person, zero credibility.

(Group interview, mixed, Alte school).

Some participants were also concerned because everyone at school knew about this and other students and teachers referred to them as *los copiones* (the cheaters). The whole situation was tense because it also affected the relationships among classmates.

The teachers decided to ask them for their mobile phones during exams –although the email described techniques that did not include the use of mobile phone– and arranged students’ desks with more distance in between. At the time of the study (one year after the event), students still did not know who was behind all this. Some participants think that the parents know since, in the end, they got involved due to the way students were being treated by the school. Parents and teachers proposed to ask the *PDI* (Chilean Detective Police in charge of cybercrimes) to get involved. Students –encouraged by the parents– in the end chose to respect the privacy of their classmate –whoever it was– and stop trying to find out for the sake of the bond between classmates in the class.

This event shows the gap between students’ and teachers’ interests, as well as how parents got involved to mediate the situation. Each group viewed the problem from their own perspective. The school was worried about the learning process and the cheating situation, while the students were worried about the relationships with their classmates, and the lack of honesty –not regarding cheating, but in relation to interpersonal relationships. And parents getting involved so this situation would not happen again, while supporting their children and their classmates’ relationships.

Participants in Alte and Vite schools support the idea of regulating the use of mobile phones, but in some ways, find absurd the way their schools deal with it. In fact, in Alte, mobile phones were not tools for cheating. Some students confess that it is much easier to cheat without phones than with

them, so the school's measure of taking mobile phones away made little sense. In Vite, students do not remember going through such a complicated situation, but some students are critical of the general approach adopted regarding the issue of mobile phones. For example, Constanza complains because her school does not worry about things that are more important than mobile phone use. If a teacher catches a student using her mobile phone, the sanction stipulated in the school regulations is more severe than that for molesting another student. This was revised in the Vite school regulations document given to me.

/Some administrative staff/ don't teach, (...) /he/ is like the academic coordinator and... and there we talked about everything, and we talked about the regulations, that there are things that we found silly, for example, it says /in the regulations/ that it was a serious offence eh... sexual harassment towards a classmate, but it was even more serious to skip a mock exam of *PSU* (University selection test) or *SIMCE* (National-scaled standardised test). (Constanza, initial interview, Vite school)

5.3.2. Cutting energy off – Vite school

In Vite school, the mobile phone situation at the time of the study was being reviewed. At the same time, due to financial constraints, the school chose to cut off the energy supply from the classrooms' sockets, except for one per classroom near the whiteboard for teachers' use. Even though the staff members interviewed claimed that the main reason was the school's budget, there is a direct relation between the decision and students' use of phones, which some participants mentioned. In fact, the intense use of mobile phones by students in the Vite class (and also in the Alte class) means that they need to charge their phones during the day. It was very common to see students in both classes charging mobile phones or asking other classmates near the socket about their mobile phones' charging status. And most of them told me about their battery problems during my visits.

During fieldwork, teachers in Vite school were dealing with this recent decision, preventing students from charging and using their mobile phones for non-academic purposes. One day (Day 9v¹⁷), students realised the socket near the teacher's desk was working and started using it. Some teachers noticed this, but others did not. A negotiation process started between students and teachers, in which some students complained to teachers, or students told off their own friends for not being more careful about the chance of losing that "last socket". In the interviews, participants from the Vite class had differing opinions on the issue. In general, they did not like the idea, but some of them understood

¹⁷ From the total number of observations in each school (table 4.4.; Appendix O), "v" stands for observations done in Vite school and "a" in Alte school.

that they had been presumptuous about this issue. However, most interviewed students do not see this measure as a big problem, since they can use the one operational socket left.

M1: because of you, they took away the sockets.

M2: how could I know, *boludo* (shithead)?

Are you being told off about this topic now?

M1: no, something we are told off, because, for example, I go /there/ [the socket left for teachers] to charge my phone and they [teachers]... If you are seen, they will take it away from you, but you are warned, they do not take it from you.

M3: you know? It is because of the budget.

Ev: noooooooo [They start discussing whether they agree or not]

(Group interview, boys, Vite school).

For Vite school's head teacher, this situation and phone use were complicated because of the pressure she gets from some parents, who want the school to control phone use. Some of the complaints are based on teachers' mobile phone use in classes, which the head teacher sees as a bad example and something that erodes teachers' moral ground to enforce phone rules.

Students' phone charging practice is also present in Alte school, but authorities have not taken a decision like in Vite. However, in both schools, they have had to make practical or technical adjustments based on students' mobile phone use. This is the case of Internet access control since, at some point, students were cracking the school's Internet password. The measures taken included cutting off wireless Internet access in the whole school, and changing passwords more often.

(...) /mobile phone use/ generated another administrative problem, for example, with the management of the broadband Internet connection. /The students/ cracked the password, they connected, in fact, when we were talking about the *Worldclass* [online platform], one of the problems we detected about why it didn't work was because we had 500 or 600 devices connected at the same time, apart from the computers. That made us change the passwords (...) and change them once in a while. (Head teacher, Alte school)

No school authorities or teachers mentioned this, but it is possible to argue that these measures are limiting the possibilities of using digital technologies in the classroom, and therefore providing a basis for teachers to resort to students' phone for educational purposes. However, measures like cutting the energy off (and even Internet connection access) at the same time limits the opportunities of making educational phone use a more institutionalised one.

5.3.3. Responsible use of social media – Alte school

The teaching unit “Responsible use of social media” in Alte school was born as a personal initiative of the Orientation teacher because she saw a need among students, particularly younger ones (from year 7-8). In the case of Year 11, the sessions focus on the lack of privacy of social media, the effects of publishing photos or videos without consent, and the danger of talking to and meeting strangers online.

...It can't believe that a Year-11 student, 15 years old, feels that she/he is friends with someone /she/he/ has never seen, even if it is a conversation about... because some /students/ challenge me, even younger ones: “Miss, but how could that person be lying for a year?”, I mean, “But you don't know him, you have never seen him”. (Orientation teacher, Alte school)

Alte students appreciate that the subject teacher let them know about online risks and possible ways to manage them. However, they also think that the teacher (because she is virtually the only one that talks to them about this issue) is not aware of the way they communicate with others online. Students report that nowadays it is commonplace to talk to strangers on Facebook or Whatsapp groups about common interests. On Whatsapp groups, this takes place because, they report, it is common to share phone numbers on other social media or be added by friends to chat groups where not everyone has met face to face.

Regarding the classes, they feel that the unit is presented, like they say, in a “boring way” (for example, “boring movie”) or that there are things they already know (for instance, talking to strangers). Without saying it explicitly, it is like they believe that it is not through teachers' suggestions that risks will be avoided.

And what do you think of teacher M talking about not meeting strangers? (...)

No, I dunno, I feel like she wants to bury her head in the sand.

What do you mean?

Those are things that do not happen, you know. You can say “You should be careful and never talk to strangers”, no, those things do not happen, you know, you say it, but you don't put it into practice. (Antonia, initial interview, Alte school)

M1: I mean, yeah it is useful, but it's like the same as saying with a movie to look both ways before crossing.

NNm: yes

M1: those are things that we already know, it's irrelevant to say that.

M2: it is okay that we are told how to prevent risks and everything, but actually this teacher is very boring.

M3: those are very common things as well.

Ev: yes

M3: I mean, somebody anonymous, someone you don't know, give him your personal data?, no way.

Ev: *naaaa* (no way).

V: I'd report him as spam right away.

(Group interview, boys, Alte school)

Despite students' criticism, the group discussions in classes (Day 4a, Day 5a) were good instances for students to discuss risky experiences with each other. Thus, interviews showed students were feeling uncomfortable talking about their personal experiences with the teacher, but in the observed classes, in group work, or during "dead times", they were very active and engaged sharing their opinion and experiences on the subject. The following excerpt of a class observation exemplifies this.

Day 4 of observation, Alte school

Extract, Orientation lesson (14.10 – 14.55 pm)

(...) The teacher says: "What does *responsible use* mean?" After some silence, BE replies: "Not sharing private stuff". Nobody else says anything. So, the teacher directly asks BR the same question. BR: "Do not give private information or something that could be used against me". BE adds: "Do not talk to strangers". (...)

"Okay", says the teacher, "two more things about responsible use". "Do I have certain level of maturity to understand: one, how long I spend using social media?; two, beyond how long or what you know, [do you know] how to behave on social media? Silence, nobody replies. (...) [*]

The lesson is interrupted by a staff member coming from outside and the teacher goes out of the classroom. Once the teacher leaves, all the students start talking to their friends sitting next to them about all the questions the teachers ask previously. (...) When the teacher comes back, students get quiet.

After interacting with the teacher, students had group discussions with their peers about this, in which, at least the groups near me (three) were sharing risky experiences and techniques to avoid them, being more open than with the teacher earlier. In this regard, the topic addressed by the teacher was adequate and topical, however the dialogue between teacher and students was not taking place, which can be related to embarrassment or to the fact that students find it obvious, as mentioned above, or think it is something they are not used to do. It is important to consider that this is a one-of-a-kind experience among all the subjects they have. In fact, in the other school (Vite school), there are no units like this one. Participants from both schools are more used to being told off about their use of mobile phones or receiving comments such as the one marked with an asterisk (Day4a portrait), where the question works more like a message that does not necessarily open the dialogue.

The events discussed in this section on controlling and educating students about phone (and social media) misuse show that both schools are concerned with different kinds of misuse: misuse that is harmful for students' education (cheating), misuse impacting school's administrative and financial issues (phone charging, Internet hacking), and misuse affecting students' online safety (texting strangers online). Moreover, students' phone misuse sometime also makes parents get involved (e.g. *Juampa Juampito*, control of phone use in classes). However, in the schools' approaches to dealing with students' phone use cannot always be seen as total opposition between the schools' intentions and students' desire to use their phones. Controlling electricity and Internet access could be seen more in this vein, where students are working around rules and school is responding with some concrete measures to control phone use. Yet, in the case of *Juampa Juampito* and the unit on

responsible social media use, teachers and students are not diametrically opposed. For example, students' reactions and perceptions also show that they care about misuse that is dishonest with classmates and about risky online actions that teachers and school authorities are not necessarily aware of or concerned about. The issue seems to be, however, that there is not always a space or moment to share experiences or find common understanding.

5.4. Dealing with the everyday use of mobile phones in the classroom

As mentioned at the beginning (section 5.1.), participants are using their phones continually in both schools in classes and breaks. However, the classroom, mainly because of formal (Alte school) or provisional (Vite school) regulations, is where this issue is contested on a daily basis and teachers have to deal directly with it. In Year 11, each teacher has been dealing with students' phone use the best way they can within the classroom. The difference between schools lies on the fact that the established regulations in Alte school serve teachers as guidelines for action. In contrast, in Vite school, the lack of official norms leaves teachers more isolated when dealing with this matter. However, in both schools, teachers are being forced to address problematic situations not covered by official regulations on their own, which serves to set the scene of what takes place inside the classroom and Year-11 teachers' daily practices in there.

Teachers in both schools report having no serious issues in their classes regarding phone use. As presented at the beginning of the chapter, most of them see it as something uncontrollable, but that does not hinder their professional practice. In the observations, teachers are able to conduct their classes in a fluid way, although with interruptions from distracting or disruptive student behaviours, some of them related to the use of mobile phones.

Teachers are aware of the importance of mobile phones for students. Some teachers even use the expression "*Se mueren sin el cel*" ("They would die without their mobile phones"). In that vein, they understand that taking this device from them, even though they may have done something wrong, is not always a good idea. Most teachers claim that confiscating mobile phones can distress students and erode their relationship with them.

<p>Yes, for them is like you were taken their life, “how am I going to talk with my friends’, “my dad is telling me this and that”, “I have to go to my boyfriend’s house”. They organise their lives around it.</p> <p>You are taking away their “memory” for the rest of the day, their organisation.</p> <p>And their communication especially.</p> <p>They care about that...</p> <p>It is like they disappear from the world, like they stop... (English teacher, Vite school)</p>
<p>I haven’t confiscated /mobile phones/, but anyway it generates a high level of stress because they see that their life is gone when their mobile phones are taken. (Language teacher, Alte school).</p>

In both schools the rule (provisional in Vite and official in Alte) is that once a mobile phone is confiscated, it must be handed by the teacher to the *Inspectoría* (Behaviour Department) and can only be retrieved by a parent. Teachers admit that almost all the time, if they confiscate a mobile phone, they just return it at the end of the class. This is to avoid problems with students, and the school bureaucracy, which in their opinion is not always supportive.

<p>Have you ever confiscated one?</p> <p>But I only take it, confiscate it during the class and in a very polite way. At the end of the class, I give it back, avoiding a clash with the student. (Language teacher, Vite school)</p>
<p>.../students/ give it to me, I leave it here, and I return it at the end of the class. I say, “put it away or do you want me to take it away”. I prefer that kind of action than punishing because if I take it and keep it, the kid rebels against the measure. I believe that we must convince them that it is a distractor and shouldn’t be used. (...)</p> <p>How do you set the limit?</p> <p>I’d rather make a mistake than do nothing. I do not punish him/her, but the school /administration/ wants me to. The thing is that mobile phones interfere in the teacher-student relationship, because he/she will be upset. (Mathematics teacher, Alte school).</p>

In Vite, additionally, some teachers mentioned that confiscating phones is problematic because there is no support mechanism about how to deal with the devices once they are confiscated. For example, in accordance to the transition period in phone regulation in this school, some teachers wonder about topics of privacy and ownership regarding the use of mobile phones. In Year 11 (also in Alte), students charge their mobile phones in the classroom, and it is very common to see them on the floor charging. Half of the interviewed teachers worry that they may end up breaking one by mistake and on an institutional level, there is no clarity of who would be responsible, the students or themselves. The same happens if a phone is lost inside the school. Teachers are aware that the phone is a private and personal object for their students. Moreover, for some teachers, school administration tends to be on the parents’ side and teachers find more support among their colleagues.

...phones were taken, one time when phones were taken, somebody lost one, so we as teachers feared confiscating phones. If I confiscate one, I will have to be financially responsible for it. (Mathematics teacher, Vite school).

If you must confiscate them [mobile phones] and return them on Friday, is there support from the school?

Sale para atrás (it is not convenient), because (...) /some parents/ make the tutor teacher get involved "Hey, are you returning the phone this or that student?" "No, to her parents", but they [the tutor teachers] respect you if you say no. (English teacher, Vite school)

In Alte school, in contrast, the new set of regulations has provided students and teachers with a clearer framework to assign accountability for phone use. For example, students and teachers know that it is forbidden to inspect or look at content in the students' mobile phones. If one of them is confiscated and taken to the *Inspectoría* (Behaviour Department), it must be turned off. Nevertheless, from talking to teachers and observing their classes in Alte school, it is possible to identify some grey areas that are not necessarily regulated. For example, the Alte Orientation teacher told students in class (Day 4a) about a parent who once complained about a student from the school treating her daughter badly online out of school hours. She was trying to make students reflect and decide whether this issue should be dealt with by school or by students' parents. She admitted she did not know the answer. The school claimed that it was not a school issue because the incident had happened out of school, while the parent claimed that the incident was between classmates. This example shows how the boundaries of school are being pushed further, where the interaction between students from the same school can happen in online spaces. This raises the question about the limits of the school's jurisdiction over what their students do with their phones.

Without a clear answer among teachers in both schools about what to do with these issues, there clearly emerges a call to stress the importance for students to self-regulate their phone use, especially among teen students. Teachers talk about the need for self-discipline among students, which –during fieldwork– did not exist in the way they expected and would allow them to improve their lessons or even incorporate phones in them more. Among the claims associated to this topic, it is possible to identify two interconnected arguments: that students have not yet developed self-regulation because more time is needed for cultural change and that they lack it because it has not been taught yet. The expectation from teachers is that students should be able to self-regulate.

...but if you ask me what do I prefer: everyone with their laptop, but there is still a mismatch, I insist, between the use, the good use of the device and our usage culture, because if I say to you "Let's read", /then/ let's read, and afterwards you can listen to music, /you can/ do something else afterwards.

Who should be in charge of that responsible use?

Family, school too, that is why it's gradual, there is still a long way... (History teacher, Vite school).

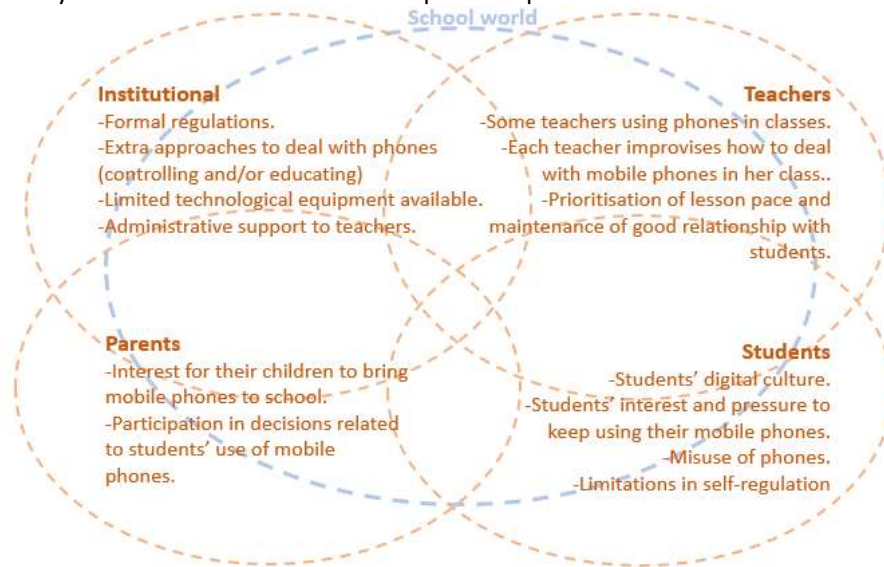
Ideally, they should be aware that mobile phones should be used in specific circumstances, but generally they don't do this, they use them, and abuse them. (Mathematics teacher, Vite school)

That idea of “I will use my mobile, but only for essential things”, doesn’t exist here, because the kids use their mobiles. And I start wandering around the classroom, for example, the older ones: “Teacher, can we look for a word?”, “Okay, do it”, and you start wandering around and there are some [students] who are looking, while others are not doing anything, so there is no such thing as self-discipline, and that self-control doesn’t exist, and if you are not watching what they are doing... (Biology teacher, Alte school)

Thus, teachers’ ways of dealing with students’ phones are largely unconnected to schools’ formal regulations. On the contrary, teachers are bringing into the equation concerns about their relationship with students as well as institutional support that the authorities interviewed are not mentioning. Teachers are opting for in-situ and short-term measures to deal with phones in their classes, while at the same time not adding extra responsibilities to their duties. Their perspective is relational and contextual, but also practical about their job.

To sum up, interviews with head teachers and teachers, as well as observational data, showed that there are diverse factors that these actors are considering when dealing with participants’ phone use in both schools. These factors are related to institutional decisions and conditions, and to teachers’, students’, and parents’ practices and concerns (Figure 5.2.). These factors work in an interconnected way. For example, there is an overall agreement among school authorities and teachers that it is important to set rules to keep mobile phone use at bay, but also that mobile phones are part of students’ technological culture, in which parents are demanding to stay in contact with their children while in school. This perspective on the importance of mobiles for students relates to teachers’ decision to confiscate their students’ phones only during their lesson. The latter can also be traced to a lack of administrative support for teachers to enforce rules when official rules are not well defined, as in Vite school. Another example of interconnection is that teachers see mobile phones as handy when students forget to bring educational equipment to classes and when there is not enough technological equipment in the school, but they are aware that this opens the door to misuse as well. Finally, official regulations do not prevent emerging phone misuse by students, which affects not only the students’ academic performance, but also school finances and online safety. Both schools are addressing various forms of misuse with official measures such as cutting off electricity in the sockets in which students charge their phones, and “putting out fires” such as cheating, in which parents can get involved to find a solution.

Figure 5.2.: Key factors associated to students' personal phone use in both schools



The first research question of this study refers to the constraining and enabling factors associated to students' phone use in school. Figure 5.2. offers an answer to this question but showing that those factors cannot be easily placed into a single category of hindering and facilitating factors. What was found was that different aspects of the schools and key actors interact in connected ways. Head teachers and teachers agree on the need to keep mobile phone use at bay, but also on the impossibility of getting rid of it completely. These actors do not always have the same perspective on how to deal with the device, but both are improvising around it. Overall, in the overlap between the world of school and the students' everyday phone use, there is a space and fluid boundaries for students to use their phones in school.

5.5. Chapter summary

This chapter illustrated the school world where students' mobile phone use and its negotiation is located. The chapter's findings were based mainly on head teachers' and teachers' interviews and classroom observations. Some students' perspectives and experiences were added regarding how schools and teachers are dealing with this issue. This chapter addressed the research question: "What elements in the school world are constraining or enabling teenagers' mobile phone use?". A variety of desires, concerns, practices, and circumstances were identified as hindering and facilitating factors. However, they appear to be working in interconnected ways, instead of clearly belonging to one category.

The school world in relation to students' phone use is diverse and multi-layered. In the background, there is the idea of the importance of having students who behave well in school and do not get distracted in classes, as well as the expectation among teachers that students should be able to self-regulate in classes. In this regard, multiple efforts have been put into practice to limit students' phone use, such as official rules and mechanisms for confiscation, and emerging solutions such as cutting of electricity from certain sockets to avoid phone charging. However, at the same time, various factors and actors' interests are allowing the presence and use of phones in Vite and Alte schools. These are not only related to students pushing the boundaries, but teachers finding educational purposes for phones; teachers and headteachers accepting that phones and digital technologies are part of students' daily lives; and parents supporting their children bringing their devices and getting involved in resolving related issues within the schools.

Both schools differ in terms of their official phone regulations: in Vite school, their total ban is being discussed and not successfully enforced, while Alte school has a total ban until Year 7, with phones being allowed for educational purpose from Year 8 onwards. Despite this, the intensity and importance of students' phone use, as well as the elements at stake in improvising ways of dealing with it, do not differ greatly between schools. In terms of teachers' practices in classes, teachers from Vite –in part because of redefinitions of rules– feel less institutional support to enforce rules. However, in both schools, teachers perceive there are gaps in how to proceed with phone-related issues, such as online bullying. Moreover, teachers in both schools are prioritising the pace of the lessons and their relationship with students when it comes to confiscating phones and giving tougher sanctions. For example, they are confiscating phones only during the lesson hour and/or turning a blind eye if it not serious.

Thus, the existence of defined rules results in clearer boundaries and roles of students, teachers, and parents around phone use. However, in practice, what is taking place is improvisation and finding agreements in the community by teachers and school authorities. Nevertheless, this journey does not become a complete opposition between schools' intentions and students' desires, since school professionals and other adults, such as students' parents, are pulling in different and diverse directions. In this regard, those elements work as an interconnection of concerns, interests, and in-situ-decisions that is ultimately leaving students with space to use their phones, although not as something easy and straightforward to do, as the next chapter shows.

Chapter 6: The negotiation of mobile phone use in the classroom

This chapter addresses the second research question “How are teenagers negotiating their use of mobile phones in classes with teachers?”. Chapter 5 showed (section 5.4.) that the classroom is the hub of both schools when it comes to daily phone use negotiation. In this regard, the classroom is seen as a porous space and a point of intersection of the school world and participants’ everyday phone use. In examining participants’ phone negotiation, some connections will be made with the previous chapter and data coming from teachers’ interviews. However, this chapter focuses on students’ practices and perceptions. Thus, class observations and students’ interviews are its main sources.

Despite the different ways each school is dealing with students’ phone use (Chapter 5), this chapter reveals no major differences in how students are carrying out their digital practices. When focusing on students’ phone use and their perceptions, the schools’ different approaches fade away.

The chapter is divided into three sections. The first illustrates the phone use taking place inside the two classrooms studied. The second section identifies background aspects of the negotiation process taken place in the classroom, showing that students’ use of phones is responding to contextual cues and pushing boundaries. Finally, the third section shows the different ways of negotiating phone use with teachers depending on phone use purpose.

6.1. Mobile phones for students: “just in case” and “always” in context

Participants’ daily life in the classroom (Figure 6.1.) could not be described without their use of mobile phones, which is varied and constant.

Figure 6.1.: Participants’ classrooms (Vite school to the left, and Alte school to the right)



Source: Vite school: taken by researcher on the last day with them; consented by participants. Alte school: one direct participant provided the photo during online dialogues discussion; agreed to use with participants.

To have a sense of a common classroom context for phone negotiation, Table 6.1. shows students' phone use throughout one History lesson in Vite. This example would be similar in Alte. Mobile phones appear in different moments and for different purposes across lessons. Some practices are detected by teachers (III.), but most of them not (e.g. IV.). Some of these practices happen at the same time as listening to the teachers (I.), or doing classwork (e.g. VI.), while others entail the students getting distracted from the task they are supposed to be doing (III.). Some are education-related (II.) or are triggered by the teacher's lesson (VII.), while others are for personal matters (V.). Describing what took place is not an easy task, since it all keeps flowing and moving between students' and teachers' personal interests.

Table 6.1.: Mobile phone use during History lesson, Vite school (Day 6).

Day 6 of observation, Vite school History lesson (8.00 – 9.30 am)			
Short description of the class	Practices with mobile phones (chronologically)	Context	Teacher's participation
Teacher delivers the lesson sitting at his desk, while occasionally looking at his laptop for some information. He sometimes stands up and writes down some concepts or dates on the whiteboard. After this, the students answer questions individually using the History book.	I. ST has been texting on her phone, while in between taking notes.	Teacher is delivering content.	-
	II. MA has a picture of the page of the history textbook they are working on. He does not have his own book.	Students just started answering questions from the history book.	-
	III. MAU and MA are playing a game on MAU's phone. Teacher calls them out: "Are you playing? Who says it is game time? Put that away!". MAU and MA do as he says.	Students are answering questions.	Teacher tells MAU and MA off for using their MPs.
	IV. MO is checking her phone. She is browsing games, then she goes to social media.	Idem	-
	V. MO, LU, MX, and BE are watching something together on MO's phone. They do this while working on the History task.	Idem	-
	VI. Alfredo, AG, and VA are individually listening to music while working.	Idem. Some students have finished the activity.	-
	VII. ST and Constanza are looking for information on Morse code on their phones and practising [both are scouts and they knew a bit about this before]. The teacher mentioned something about this earlier.	Students have finished working on the questions.	-

Legend: Direct participants are referred to by their pseudonyms and indirect participants by their initials.

As will be shown in more detail in the following sections: "The mobile phone is like a 'just in case' and an 'always'. Thus, it will always be there just in case." (Rosa-Maria, group interview, Vite school). Rosa-Maria's quote summarises the basis of the negotiation that takes place at school for students. On the one hand, students from both classes report mobile phones are part of their daily life. It is their way to get in touch with friends and families –it is an "always". Like in the History class (table 6.1), mobile phones are important as communication and entertainment sources (I., III., and IV). On the other hand, it becomes a "just in case" when they need to solve a problem or improvise. For example, when students do not have a book and need to take a picture of some pages (II.) or want to look for further

information about something discussed in classes (VII.). Thus, for students, their mobile phone “needs to be there” in the school and classroom. Like teachers, who exemplified that students “would die without their mobile phones” (section 5.4.), students commonly use a similar expression when asked about what would happen if they lost their phones or forget to bring them to school: “I would die”, even though it has happened to most of them and they recognise they have “survived”. The variety of uses they give to their phones (communication with other people, entertainment, and school work) emerged as the feature that makes their phones so important for them.

I feel that it [my mobile phone] is very important because through my mobile I talk to my boyfriend, I arrange things, I do things, you know, I listen to music, it is like my entertainment. When I must do things, like homework or things like that, it is also important. It is also important for communication. Even to talk to my mum it is important. (Antonia, final interview, Alte school)

Some participants reported that, in their view, their phone use is slightly more frequent out-of-school and more for recreational purposes. However, most of them reported that they do not see a substantial difference between what they do in- or out-of-school with their phones.

Thus, the first element to understand how participants negotiate their phone use is considering the importance that the device has for them as an essential part of their daily lives. However, the “always” and the “just-in-case” uses are also embedded in the conditions and relationships students have with their context. In fact, for example, the History lesson (table 6.1.) not only shows the variety of uses but the different elements students are responding to when using their phones and the overlap of practices and interactions (e.g. practices III., V., and VI.). Focusing on the negotiation process that takes place in the classroom, therefore, entails delving into what elements students consider to be available *resources* (Holland et al., 1998) in their relationship with teachers, their peers, and their own perception of the context. This will be explored in the following sections.

6.2. Reading the context and pushing boundaries

As shown so far, students' use of mobile phones is intense and constant in school. In line with teachers' impressions (chapter 5), students are aware they are pushing boundaries and breaking rules.

And if you all were told: "that's it, starting tomorrow nobody can bring their phones"

Noo, I don't think it will happen because even if they say so, everyone will bring it anyway, even if they are told off and are told to not bring it anymore. (Alfredo, initial interview, Vite school)

For example, last Monday, a group, the other day, F's mobile phone was taken from him. (...) you know, and then he asked for another phone, so he could call his mum, so when she came to bring him his lunch, the mobile phones could be returned to him. (Vicho, initial interview, Alte school)

These quotes show that students are working around rules, as well as insisting in their phone use if necessary. They also show that students are reading their context and considering what is taking place in their surroundings to resist it, avoid it, or incorporate it. In other words, their phone use negotiation, which enables them to use their mobiles, is an agentic act within cultural worlds (Holland et al., 1998), and not just an action in the void. The following subsections explore the elements participants in both schools are paying attention to in their phone use. These include their feelings, class activities, subjects, teachers' actions, and institutional regulations, to name but a few.

6.2.1. Contextual motives to use mobile phones in classes

In general, participants constantly justify their phone use as something important and inevitable. However, when exploring further with them why they keep using it, they admit being aware that it could be problematic and disrespectful for teachers and even detrimental for themselves (e.g. bad grades). No student justifies their phone use completely in classes, but also none of them agrees with a complete ban.

M1: the phone distracts you, but sometimes... I mean, it is clear that when /the teacher/ delivers content you don't use the phone, well...

NNm: it is not convenient for you.

M1: it's not convenient because you are not going to understand the content, but when... you are doing an activity, tasks, and you finish quickly, you can use your phone.

(Group interview, boys, Vite school)

Why do participants keep using their phones regularly then? In general terms, this is a response grounded in the activities they are doing in classes, and what is taking place there. In that regard, phone use is contextual. Ultimately, this whole chapter aims to shed light on these reasons in-situ. As a first step, it is possible to identify some general contextual reasons, which set a basis for the following sections. These reasons can be divided into three groups: solving something, getting bored and/or frustrated, and seeking relaxation and/or excitement.

The first one refers to the practical aspect of mobile phones: they help students **to solve something** taking place in classes. For example, to look for information, finish homework, prepare presentations, or take a picture of a textbook because they did not bring the book to school. Although some of these practices are quite common, participants emphasise how handy the phone can become for sorting out unexpected situations.

Constanza: (...) One of the functions of technology and mobile phones and everything, I believe is to help and facilitate the things that you have to do, for instance... there are some moments when the teacher does not know how to look for a term or things like that, or we want to get more in-depth information, we use mobile phones to look for information about the topic...

(Group interview, direct participants, Vite school)

Students report that these kinds of uses are understood to be accepted or should be accepted because they are in line with educational aims and what teachers expect (see also section 6.3.1.).

The other reason to keep using the mobile phone is students **getting bored in classes**. In the group interviews, this merges as a common way to describe the moments when they use their phones for leisure (e.g. texting) or just to check the time. Being bored, however, could be the result of different things. It could refer to what students commonly call “doing anything” (for example, breaks during classes, have finished their work, the teacher is not delivering content). It could also refer to moments in classes that students find dull or repetitive.

Simona: What I do, when I am like bored and, I dunno, anytime I am bored, is to take my phone and check my photos, and start deleting /them/, and organising data...

(Group interview, direct participants, Vite school)

W1: sometimes /teachers/ deliver content in a boring manner, so like...

W2: ...it is like they keep doing the same thing.

W1: so, it is like you already know, what is the point in paying attention.

W3: Language, always the same.

W1: In Language we are always quiet, so it is not too obvious [that they are using their phones].

(Group interview, girls, Alte school)

Frustration is related to boredom. This refers to losing track of what is being or has been explained by the teacher. Some students admit that they deliberately start doing something else, like listening to music or looking for information.

W1: Sometimes I use it [phone] because I do not get anything, so I just look up the information on the Internet and it was /there/!"

(Group interview, girls, Alte school)

Finally, participants mention that they use mobile phones **to feel (more) relaxed or entertained**. This could also be considered the aim of using them when they get bored or frustrated; however, they sometimes report using them because they feel stressed in classes. Moreover, I would include in this desire to relax some references students give about feeling good when they manage to use their phones without being caught. Thus, playing games, listening to music, or playing tricks on teachers can be reasons to feel better with their phones.

M1: you feel more *bacán* (cool) when it is without permission.

M2: yeah!! *Que no te cachan* (Without getting caught)

M3: it's more rebellious, haha [joking]

M2: Nobody sees you and you're like this... [mimics hiding movement]

M3: yes

M1: there with your hoodie.

Too lame getting permission?

Everybody: yeeeeees.

M1: it would lose its appeal.

(Group interview, boys, Alte school)

The reasons expressed by the students to use their phone can be seen as answers to what they are perceiving, feeling, and living in the classroom, as well as seeing opportunities to do it. The next sub-sections delve into the latter.

6.2.2. Knowing when and knowing with whom

From interviews and observations with students it is possible to say that, overall, students try to avoid being caught when using their phone in classes, or if they are, at least avoid confiscation by their teachers. However, observations make it possible to identify different intensities in the use of phones depending on the moment or structure of the class. In general, phones are less visible when teachers are delivering content. Moreover, from what students report in the interviews, this is the moment that they respect the most. Group work, or after finishing a test or activity, on the other hand, are times when it is much easier for students to use their phone.

M1: if there is some free time then, you say “Teacher, can I use /it/? And then, yes.

Is it common for you to ask?

M1: the thing is that if we finished earlier, and there are 10 minutes left... you can listen to music, I don’t know, sleep.

NN: rest.

(Group interview, boys, Vite school).

M1: when the teacher is distracted, and I have already finished taking notes, and /the teacher/ already explained the topic, it is like mmm, I connect /to the phone/.

(Group interview, mixed, Alte school)

This is related to what students identified as “doing anything” and being bored in classes. It is when they perceive that nothing “educational” is taking place in the classroom that they feel safer to use it. During class observations, it is common for teachers not to tell students off if they are not bothering others.

It depends on the moment, for example, if /the teacher/ is doing anything, if the teacher is marking tests, for example, it is very common, we just use our mobile phones, and the teacher says “okay, [all] stay quiet, silent, do what you want, but don’t bother others”. We are all there, chatting sometimes, sometimes playing cards... so... the rules exist, but it is... [unfinished idea].

(Rosa-Maria, initial interview, Vite school).

Knowing when to use one’s phone also involves students being aware of personal situations. For example, acknowledging that some subjects are difficult for them or the teacher is delivering new content. In those cases, they report paying more attention and using their phones less.

M1: Anyway, there are some subjects where I listen to music, but I take one [earphone] out when it is more important to listen [to the teacher], for example [inaudible], Biology, that are the ones [subjects] where /the teachers/ deliver more content, and you have to learn names.

(Group interview, boys, Alte school)

Apart from making distinctions among moments in the classes, students also see differences amongst teachers. They claim that no teacher will allow them to explicitly and visibly use their mobile phones in classes; however, they say that teachers differ regarding the degree to which they worry about this matter and enforce rules.

Rosa-Maria: (...) there are teachers, who sometimes allow you, but sometimes don't and they say "put that phone away".
Ev: yes, yes.
(...)
Simona: ...for example, the Chemistry /teacher/ there's no way she will give you a chance.
NN: yes
Simona: ... but teacher P, always says, "Take a photo of the /text/ book to do your classwork", but Chemistry, arghhhh
(Group interview, direct participants, Vite school)

M2: with U yes.
M3: he is the easiest.
M2: also with teacher A.
M4: L as well.
M3: the difficult ones are R... [interrupted]
Ev: Yes!
M3: teacher P, sometimes, depending on his mood."
(Group interview, boys, Alte school)

Knowing the differences among teachers entails also knowing the degree to which they need to be careful with each of them. Students recognise which of them are more easy-going with the use of phones, and particularly who are the ones who are more problematic for them. The latter tend to be those who confiscate their mobile phones.

Students report that in very extreme cases, teachers could take away their mobile phones after the class is finished, but they generally do not do it. This relates to what teachers reported (chapter 5.4.) about avoiding doing this because there is not enough institutional support to back up their decisions and/or because they do not want to jeopardise their relationship with students.

6.2.3. Being aware of changes and teachers' actions

Students are also aware of changes in the regulations and compliance of rules over time. In both classes, students remark they are told off less by teachers now. Most of them remember that phone use was more problematic when they were younger (Year 7-8). They associate this with the fact that they are older, and that teachers are tired of trying to stop them. These ideas can be related to the perspective of teachers of their students' phone use as "inevitable" (section 5.1.) and their wish for them, especially older ones, to be self-disciplined (section 5.4.).

M1: (...), but it is like they [school authorities] do not want to put more effort into it [control phones], because there is nothing they can do.

M2: it is like they avoid it now, because obviously, everyone of us will use the phone.

(Group interview, boys, Vite school)

M1: regarding the phone, I think, I mean, I've realised that in *básica* [lower-secondary levels] we were told off a lot about this in classes, a lot.

M2: it was given a lot of importance.

M1: ...and now in *media* [upper-secondary levels], I believe that most teachers are like: "those who want to learn, will learn, those who don't..."

M3: it is like that [agreeing].

Ev: yeees.

(Group interview, mixed, Alte school)

Students are also aware of the fact that teachers use their own phones during classes, especially when students are working on their own. This is not a common practice and not all teachers do it, but it was visible in both schools during fieldwork a few times (also see section 5.3.2.).

W1: sometimes even the teachers are using mobile phones. (...)

W2: but [name erased: language teacher] is sometimes like half an hour; a lot of time and he forgets about us because he's on the phone.

NN: yes, he is like laughing by himself.

Ev: yes

W2: he is like...

W1: yes, like "what was I saying?"

NN: haha

W3: he is dictating and [then] he stopped... and it's like "where were we?"

W2: the English teacher during the exam was using his phone all the time and he was like smiling.

(Group interview, girls, Alte school)

In that regard, teachers' actions are a point of reference for students. The example of the electricity cut in Vite is very illustrative (section 5.3.2.): students from this school referred to teachers' phone use as an excuse to keep using and charging their phones in the one functional socket left next to the teacher's desk. Students in Alte also mentioned teachers' phone use as implicit permission for them to use theirs.

Yeeees, it's very *rasca* (referring to a poor argument), the teacher said like "uh, I can charge mine" [teasing tone], but we say, "why can he do it and we can't?" [fake crying]. (...) P told us like "you spend all your time on the phone" and it happens that actually the teacher who uses it more is P. Because, I don't know, he says, he gives us homework and while we are doing homework, he is on his phone.

(Constanza, initial interview, Vite school)

And what about charging your phones in the classroom, is it a problem (...)?

Ev: noooo

W1: in fact, teachers also charge [their phones].

W2: teacher F sometimes, we lend him the charger [theirs] and he charges it...

M1: [overlapped] ... "Who has a charger?"

W2: ...like... "there is a socket there".

(Group interview, mixed, Alte school).

The other kind of use teachers give to mobile phones is to interact with students directly, for example, sharing things with them in a more informal way, or symbolically, entering their youth worlds. Examples of the latter, reported in the interviews, are the English teacher in Vite school who sometimes draws on the whiteboard, and allows students to take pictures of them, or teachers who ask students about photos of other teachers, or memes or videos that they have heard of. This direct crossing of boundaries seems not to bother students; what is more, they enjoyed remembering situations of this kind in the interviews.

Teachers' phone use, overall, has been identified by students as a reason why teachers have not forbidden them to use theirs, but in general their teachers' phone use does not really bother them. In some ways, it is like having an excuse, "just in case", waiting to be used but it is not something that they found terrible or even too unfair.

Thus far, this section has shown that students are actively interested in preserving their mobile phone use in the classroom. To do so, they are taking into consideration different aspects of their classes and relationship with teachers. They are making judgements based on what is taking place in class, how they feel about it, moments of the classes, personal academic status, and teachers' actions in the present and over time. Students, therefore, are reading the class context they are in. In doing so, they

are pushing the boundaries of the world of school in relation to phone use. However, teachers are also giving space and blurring boundaries when they use their own phones or interact with students using their phones.

Interestingly, especially in group interviews, most students explain phone use in classes ultimately as a matter of individual responsibility (“it’s up to you”). This resonates with the teachers’ claim about self-control (section 5.4.), showing a shared understanding about what is expected from students’ behaviour in classes. Among students, this also connects with their identification of “grey areas” and space for phone use that they do not regard as negative for them and the class.

It is like you are saying that there is like a good and bad use? [in relation to the classification of digital practices they made] (...)

Rosa-Maria: it depends, it depends

Simona: to be honest, I don’t think that it is bad to talk to other people and everything, but sending answers and all that stuff yes.

Rosa-Maria: the problem is not the device; it’s the users.

NN: yes

(Group interview, direct participants, Vite school)

Do you see the phone as something distracting?

Ev: yes

W1: sometimes yes... it is like, it depends on the person being able to control herself when she gets distracted.

W2: I don’t know, I feel that I can control myself very well, so like...

W1: There are people, for example, my cousin, she is not given Internet access because my aunt knows that if she has it, she would spend all day on the phone, so it depends on the person...

(Group interview, girls, Alte school)

Despite this individual accountability in using mobile phones in classes, I would claim that students do not use their phones in isolation. As this section showed, there is a collective understanding of their classes (moments, teachers, feelings, institutional changes) to use their phones and they have each other to support their actions. Amongst this collective approach in reading the classroom context and blurring boundaries, it is possible to identify, however, a variety of ways to orchestrate different elements depending on the kind of use given to phones by students (education, leisure, communication/interaction). The next section will delve into this diversification in both schools’ classrooms.

6.3. Practices and strategies involving mobile phones: diverse mobile phone use

Participants are considering and paying attention to diverse elements of their classes when using their phone. The analysis of students' interviews and class observations showed that those elements are orchestrated in different ways depending on the uses students are giving or plan to give to their phones. Strategies to use their phones also differ depending on use types.

The following section will explore those strategies considering the most frequent uses of mobile phones in classes: educational use, listening to music, communication with peers, and communication with family members¹⁸.

6.3.1. Educational purposes

As shown in the previous chapter (section 5.2), there are some educational uses of mobile phones guided by teachers in both classes, such as **calculator, dictionary, and web search**. However, not all educational phone use in the classroom has been originally planned or permitted by teachers, but rather pushed by students' actions. In this regard, educational phone use, although implicitly accepted, is not always conceded easily by teachers or is not seen as ideal. A good example of the educational use of phones that occurs in classes in a negotiated way can be found in table 6.2. The table shows an extract of a Chemistry lesson in Alte. It shows the tension between desired and not-desired uses teachers deal with in classes, while students combined both in working towards the task set by the teacher.

¹⁸ Frequency is based on observations and discussion during students' interviews.

Table 6.2.: Mobile phone use during Chemistry class (extract), Alte school (Day 2)

Day 2 of observation, Alte school			
Extract, Chemistry lesson (10.00 – 11.30 am)			
Short description of session	Practices with mobile phone (chronologically)	Context	Teacher participation
Teacher summarises previous class and then starts to deliver new content on the same unit. He uses Power Point slides. Then, he dictates some exercises for the students to solve in their notebooks.	Some students are holding their phones; others have their phones on the desks. Teacher asks the class to put their phones away.	Teacher is about to start the class.	Teacher asks the class to put their phones away.
	VA says to the teacher she has no scientific calculator. Teacher replies: “okay, use your phone, but just this one time”. He says to the whole class, that they can use the phone only this time. He also reminds them that they should use the scientific calculator, and that the phone is for entertainment.	Teacher is giving instructions.	Teacher accepts students using their phone’s calculator.
	ED suddenly moves to another seat. The teacher asks him: “where are you going? And why with your bag?” The student answers that he needs to charge his phone.	Students are solving exercises.	Teacher lets a student charge his phone.
	NE is using her phone to play a game. FC, at the back of the classroom, is checking her phone.	Idem.	-
	Antonia is using her phone, texting and checking. Teacher tells her off and asks her to put it away. Antonia replies: “I am talking to...” Teacher interrupts her: “no, put your phone away. The phone can be only used as a calculator”.	Idem.	Teacher tells off Antonia because of her phone use.

Legend: Direct participants are referred to by their pseudonyms and indirect participants by their initials.

In this class, students have not brought their calculators for Chemistry. The teacher reported at the end of the class (Day 2a) that he was worried because students do not know how to use it and have low ability to solve mathematics problems. The phone calculator does not have the functions he needs for his class, but he needs the students to solve the exercises. Thus, he gives up for the sake of the class. This situation is also common in Vite school and in both schools in English and Language classes with dictionaries.

(...) the dictionary available in the school that is used in my subject, in English, they [students] don’t use it because they are lazy. On the phone, they have a dictionary and they prefer to use that one, so, there are times when I give up because I’d rather they do the work than do nothing and then... I don’t know, if it doesn’t bother me, for example, today they were presenting, and if it doesn’t interrupt somebody else’s presentation, I’d rather they focus on their phones than bother others (...). (English teacher, Vite school).

What the Vite school English teacher mentioned here, and what other teachers from both schools said, is that, as teachers, they will prioritise students’ work and the pace of their classes (see also section 5.4.). In practice, students also know this and use phones to their advantage because it is their belief that as long as there is an educational purpose, it should be fine. Thus, students initiate this kind of use by asking for permission or just hoping not to be caught. Some students also imply that it the school’s fault for prioritising results and grades over the process of how school activities are done.

<p>Rosa-Maria: it depends on the activity because if we are working with roots [mathematics]</p> <p>Alfredo: in Physics, you need a scientific calculator.</p> <p>(...)</p> <p>Rosa-Maria: in maths, we use our mobiles, because we are allowed to use our phones as calculators.</p> <p>Constanza: yes, in fact, the teacher tells us, asks us...</p> <p>Rosa-Maria: ...in physics, the teacher asks us to use a scientific calculator.”</p> <p>(Group interview, direct participants, Vite school)</p>
<p>M1: sometimes teachers allow this.</p> <p>NNm: yes</p> <p>NNw: yes</p> <p>W1: the thing is, I believe, is that this is an academic school [focused on grades], what matters are the grades, so, for example, if we get..., we answer a worksheet and we copy the answers [talking about phone use], if we get good grades, it is alright...</p> <p>(Group interview, mixed, Alte school).</p>

A less tense approach occurs in Music and Arts lessons, where teachers’ actions with their phones and laptops set the tone for a kind of phone use that is mutual and less contested. In these classes, teachers use their phones and laptops to work **with images and sound**, and students in some classes use their phones to get access to them. I never observed a problem around these kinds of uses (e.g. Day 2v, Day 10a). This situation may be related to a lack of technological equipment for these classes (section 5.2.).

<p>“Listening to a song on the phone as a guide to play a song in Music” [reading a piece of paper] (...)</p> <p>Rosa-Maria: [it’s] academic</p> <p>But it’s not authorised...?</p> <p>Rosa-Maria: it is authorised</p> <p>Simona: yes</p> <p>Rosa-Maria: I mean for the teacher yes.</p> <p>Okay</p> <p>Constanza: yes, it is, actually, even the teacher plays songs on his laptop (...) like, he tells us to look for [one], so it is like... [implying that it is obvious].</p> <p>(Group interview, direct participants, Vite school)</p>

Together with practices that are allowed by teachers –either due to students’ pressure or teachers’ interest– there is another educational practice that was born more clearly from students’ interest and that some teachers have been adopting: **taking pictures**. Students take photos of textbook pages, worksheets, or the whiteboard. This takes place quite often, although it is not done by all students. In a similar vein, but less commonly, I observed **students recording** classes or their classmates, for example, summarising a novel or explaining specific content (Day 6v).

<p>W1: (...) The teacher was telling me not to take a picture [of the whiteboard] and I did it anyway.</p> <p>Which subject?</p> <p>Ev: Chemistry. (...)</p> <p>W2: I just hide my phone and take pictures, that's all .</p> <p>W3: me in Biology, and in History I record all the classes, All of them!</p> <p>(Group interview, girls, Vite school)</p>
<p>W1: taking pictures of the whiteboard, it's like permitted...</p> <p>W2: ...you must ask for permission anyway.</p> <p>Ev: noooo</p> <p>Who says "no"?</p> <p>W1: Almost nobody asks for permission.</p> <p>(Group interview, girls, Alte school)</p>

Students take pictures of the whiteboard when teachers work through content too quickly, especially with Power Point slides. They take pictures of books' pages or worksheets when they do not bring theirs. In both cases, teachers generally accept these practices. However, students also frequently take pictures of exercise solutions in classmates' worksheets or notebooks as a guide or to copy the answer. As expected, in the latter case, students avoid being caught by teachers.

Using their phones to replace calculators and dictionaries, perform web searches, access pictures, or sound, and take pictures are among the functions that students take advantage of for studying and revising at home as well. In this regard, there is cross-boundary movement between the school and out-of-school domains. According to the interviews, students are used to sending pictures of their notebooks, exercises, and audio messages of them explaining content to their classmates through WhatsApp. The pictures students take of the whiteboard, books, or worksheets are also shared on WhatsApp, most of the time on the class chat group. Students are used to storing school resources in their mobile phones, including Power Point presentations and pdf documents. It is common to see them revising before a test or presentation, or doing homework using their mobile phones. Therefore, it is possible to say then that what students are negotiating is a way of studying and revising that brings their daily experience into class activities with teachers, where this technology-mediated approach has in some cases become more "official".

To summarise, the educational practices involving mobile phones that take place in the classroom share a strong sense of practicality (section 6.2.1.). Teachers and students are solving some issues, such as a lack of materials, making the class more efficient, or making sure that the task requested is done. For teachers, this ensures that lessons will go as planned; for students, this enables them to work in a way familiar to them. However, this sort of agreement does not mean that educational

phone use is not directly negotiated between teachers and students. On the contrary, as shown in this subsection, although some educational phone uses are fairly accepted (e.g. pictures and sound in arts and music, taking some pictures), they have come mainly from students' pressure. Other educational uses –such as using mobiles as calculators– are still being improvised and discussed, while others – such as taking pictures of answers– remain largely hidden and are unlikely to be accepted by teachers.

6.3.2. Listening to music

In both schools, students commonly use their phones to **listen to music**. This is one of the most frequently mentioned practices as something important for their daily life: on the way to and from school, in classes, and in breaks. This practice was one of the most visibly negotiated use between teachers and students in classes, being not promoted in almost any way by the teachers. However, it has gained a space in classes, and even for some indirect educational purposes. Students know that listening to music in classes can be distracting, but they say they need it sometimes for relaxation and others for concentration (see also section 6.2.1.).

It's, for example, in mathematics I concentrate more with music, but in language I can't.

And when the teacher is delivering content? (...)

No, I take them off then [the earphones], because I have to pay attention, so, "let's stop the music". (Alfredo, initial interview, Vite school)

The teachers, on the other hand, have different perspectives. Some of them occasionally allow students to listen to music while they are working individually or in groups, while others never do. Not all teachers agree that listening to music is appropriate for their classes and students.

They [students] want to work, for example, I don't know, on a worksheet, relaxed, "Can I listen to music?", it is the first thing that they ask you. If it is a reading task, I don't [allow it] because I want them to focus on that, I don't want them to be [in contact] with distractors. If it is a grammar worksheet, I say yes, they can listen to music. If it is a writing task, sometimes, depending on the kind of task... (English teacher, Alte school)

As illustrated by the quote above, teachers make distinctions between the activities students are involved in. English and Language teachers in both schools mentioned that, while reading, it is not a good idea for students to listen to music. Teachers also mentioned tests and delivering content as moments when listening to music is forbidden. However, in general, interviewed teachers understand that sometimes listening to music is okay if students are not bothering others and are working.

Students generally ask permission to listen to music in class in some situations; however, many listen to music surreptitiously. Some students even claim that they have done this in tests because it really helps them to concentrate.

Are you allowed to use them [earphones] sometimes?

W1: mathematics, mostly, to “concentrate” [airquotes]

What about other subjects?

W2: arts, mathematics. (...)

W2: In Physical Education, but secretly, because we are not allowed.

W3: (...) for example, I play volleyball, like in the last class... I started to play volleyball; and I was listening to music, moving to the rhythm of the music! Ehhhh, then the ball came and ehhhhh [“wrong answer” tone]

(Group interview, girls, Vite school).

M1: (...) because sometimes you ask for permission to listen to music when, for example, they [the teachers] give you a task and “Ohhh, teacher, can I listen to music”, “okay”, “and then you can.”

(Group interview, boys, Alte school).

During fieldwork, there was no agreement on the matter. Teachers want the students to be quiet and pay attention when they deliver content; also, they want them not to distract their classmates. Thus, students know that not being noisy is key in the classroom, and using earphones allows them to accomplish that.

M1: sometimes I listen to music and behave better.

M2: hahaha, yees.

M3: we are quieter.

M2: In fact, teacher U always congratulates me when I am listening to music. He doesn’t know I am listening to music and says to me “You behaved very well today”.

M3: haha, same here.

(Group interview, boys, Alte school).

It is possible to claim that listening to music has become a practice that is blurring the boundaries between the educational and everyday use of phones in school. This situation reflects the conditions some students want to study in and the way mobile phone use is realising that possibility. Listening to music connects to other educational uses, such as taking pictures, which was not originally promoted by schools or teachers (section 6.3.1.). However, listening to music is more closely related to personal aspects of students, such as their desire to concentrate or combat boredom (section 6.2.1.), than to a sense of practicality. Finally, since listening to music is not something that is formally allowed or forbidden, students must find out how to do it and how to interact with teachers in this regard in situ.

6.3.3. Communicating with peers

Online communication¹⁹ together with listening to music are the most common ways of using phones among students in classes. However, contrary to listening to music, communication is probably the least accepted one, especially if it is among peers. In this section, communication with peers will be addressed since the negotiation with teachers is different when it comes to family.

The most problematic aspect of **Communication with peers** during classes is online communication with others out-of- or in-school. However, that communication is often embedded in offline interactions in breaks and in certain class activities (e.g. Day 8a portrait, see below). The English teacher's quote depicts well what online communication with peers entails.

So, /they/ find out what is happening on the class' Whatsapp /group/, what happened on Facebook, all that in less than five minutes, and they have to be there, and they have to be there, and that is why they charge their phones during breaks, while they eat a nibble, they have to chat with their friends, they charge it, and they go out for the break, and sometimes they are in a group of four, and instead of talking among them, they are on their mobile phones, showing pictures, and texting to a friend that is in another school, or maybe they are in a virtual network where there are hundreds (...). (English teacher, Vite school)

In general, peer communication among students is something that takes place mostly out of the sight of teachers, and only sets off the alarm when it gets in the way of the classes or when it is related to misuse (e.g. bullying, offensive use; see section 5.3.). This is because mobile communication in general, and with peers in particular, is something that students work hard to keep out of the sight of teachers. Here, not being caught and the adrenaline rush for some students is at stake (section 6.2.1.). Thus, the negotiation of this practice, although also in the intersection of teachers' and students' desires, results in less redefinition of boundaries. For example, this is different in the case of listening to music (section 6.3.2.), where the overlap means that boundaries are being redefined, thus allowing some leeway. Communication with peers, in contrast, does not serve as an excuse for students to negotiate with teachers.

...sometimes we are all sitting down, and we can't chat, because it's really common when our classmates are taking an exam and we have finished already, and we cannot talk, we start texting. (...) Last year, we [group of friends] were all talking in the group chat [Whatsapp] *las marmotas* (the groundhogs) and suddenly, I send a message and the others hadn't silenced their phones and they rang "tiririri" [incoming message sound], and like, "come on, stop", haha. (Constanza, initial interview, Vite school)

¹⁹ This includes phone calls or traditional messaging, but these uses are much less frequent.

Observations show that texting or checking one's phone individually is common, however, as the quote reveals, texting with peers is interwoven with what is taking place in the classroom. Moreover, peer communication generally **overlaps with school work**. The following portrait (Day 8a) gives a good account of this. The way it is depicted is rather uncommon because this is a class that took place in the school yard, where students worked in groups by themselves most of the time, while the teacher walked by on his own. However, because of this setting, it is possible to see more clearly how students combine practices for a longer period.

Agustina (Alte school) and her group of friends are completing a worksheet sitting on some cement stairs in one of the school yards, while texting one of their friends who is queuing for a Rihanna concert and missed school that day. Next to them is Antonia and two friends, who are also doing the same worksheet. Both groups combine face-to-face communication and online communication while finishing the assigned task.

Day 8 of observation, Alte school

Extract, Language lesson (15.50 – 17.20 pm)

Agustina is working on the worksheet, while in between talking with her friends. They are checking one of their mobile phones, texting, recording, and listening to audio messages. The voice from the incoming audios is C's, who didn't come to school today.

Antonia, IM, and IL are sitting next to Agustina's group of friends. They are listening to music from one of their mobile phones. IM and IL are working on the worksheet. Antonia is engaged talking to them, but not working. She is checking and texting on her phone.

The teacher shows up and everyone hides their phones.

Once the teacher leaves, Agustina's group go back to what they were doing. They start talking to C again (...) While talking to C, they do some work on the worksheet. They stop talking to C. B reads aloud some instructions from the worksheet and their answers to her group. IL –from Antonia's group– moves to Agustina's group. She takes notes, comparing their responses and copying some answers.

IM and Antonia are still next to the other group chatting. The rest of the girls call C and turn on the speakers for everyone near to hear. IM moves to the other group.

Then, both groups are checking their answers together, except from Antonia, who is still in her original location, checking her phone. (...) They finish the worksheets. They spend the rest of the class talking to each other, while using their phones.

Using the phones for communication with peers becomes more visible when the teacher is not around. Despite their intense communication, and not everyone engaging on the worksheet (e.g. Antonia), both groups complete their worksheets. As in this example, communication with classmates who did not come to school is common, especially when **they are ill**.

When somebody is ill it is like “hey, you got a 2 [bad grade]”, haha, “hey, you got a good grade”, “you have [to do] a project, I’ll send you the pictures”, “we organised into groups, but you didn’t come, we included you anyway”, it’s like that.

(...) Yes, for example, I shouldn’t say it, but when they are taking an exam and they say “hey, what is the answer?” and the people who are ill they have the notebook with them, so is like “ah, yes, here it is” (Simona, dialogues interview, Vite school)

Finally, students also report that it is common for them to keep in touch with **friends who are in other classes in the same school, or friends in classes from other schools** from the same level or age. They share what is taking place in their respective classes, and how they feel about it. Therefore, this kind of communication serves as support when they feel lost or have something to share that could be problematic or funny. Participants value this communication because it makes them realise that they go through similar experiences.

(...) with V [friend from another school], we always /talk/, and moreover we are in the same grade with V, um, we are working on the same units on everything, so it’s like V /sends/ a picture to me and to ST... organic chemistry, that’s what we are studying now, and it’s like “organic chemistry!” and me “we are revising the same, haha”. In fact, we help each other. (Constanza, Initial interview, Vite school)

W1: Sometimes we also talk to people in other *cursos* [class groups]

Ev: yes.

During the lessons?

Ev: yes

W2: generally, it’s a group thing, like one talks and we send the audio,

W3: but not people from the same *curso*, but from other *cursos*. (...)

And what can the conversations be about? (...)

NN: “what are you up to?”

W3: that’s how it starts.

W1: and we send pictures of the class and things like that.

(Group interview, girls, Alte school).

Communication with peers during lessons appears in both schools as something that is almost never negotiated directly with teachers, but as something that occurs in a hidden way. However, we need to remember that teachers turn a blind eye when students use their phone without interrupting the class (section 5.4.). This is probably what took place in the event portrayed above (Day 8a), since other groups were also using their phones that day while the teacher was walking by. For students, communication with peers is important for entertainment, relaxation, and friendship; in that regard, I could argue that the online space –via mobile phones– has become a school space as well, where their perspective of school and classes is being shared and depicted. Within the classroom, communication with peers could be related to students’ preferred way to study or revise while communicating with others (section 6.3.1.). Data analysis showed that students manage to do the

activities assigned, although is questionable if it is the ideal way teachers would like them to work. On the other hand, the combination of entertainment, friendship, and school work may be related to finding support from others in certain cases.

6.3.4. Communicating with parents

As previously mentioned, students also communicate with their parents through their mobile phones. This communication takes place on a daily basis and generally with mums. Its aims are **coordination, information, or emergencies.**

The following portrait is an extract from an Orientation class in Alte (Day 3a). It depicts an emergency that took place and how the teacher in charge and the students reacted to it and communicated with their families. That day, unexpectedly, the water supply was cut off, which in Chile, by law, leads to suspension of classes. When the Orientation teacher enters the classroom, the students are restless. Some of them are complaining because they are not allowed to leave the classroom and school, while others are just texting and making phone calls.

Day 3 of observation, Alte school

Extract, Orientation lesson (14.10 - 14.55 pm)

(...) The teacher asks the students to calm down and put down what she calls a “mass hysteria”. She tries to start the lesson, but most of the students want to know what is going on with the water issue. (...) Some students, who were outside, come back and say that they are not allowed to leave. In that moment, the students want to make phone calls, and go out to complain. The teacher decides to go out for herself to gather information.

In the confusion, some students also go out the classroom. They find out –before the teacher– that students will be allowed to leave if a parent or guardian comes to pick them up. The teacher adds that a member of the school admin will come to let them know which students can leave the school.

The first half of the session just passed, and already a quarter of the students have left the school. BA stands up and says –while approaching the door: “My mum is outside” and he leaves the classroom. Like him, other students just left saying that there is someone waiting for them outside. This has taken place before someone from the school staff comes to let them know about this. (...)

Ten minutes after the end of the session, the *Inspectora General* (Head of Behaviour Department) pops in the classroom and informs that nobody can leave the school premises before being informed they can do so. And that phone calls are forbidden. Three minutes later, a staff member comes to read a list of the students that can leave. All of them had already left. Once the staff member leaves, and despite the instruction, the teacher decides to authorise students to make phone calls. Phone calls are now more visible. Some students answer phone calls, most of them without asking for permission of the teacher (...)

This event shows different things related to the students’ communication with parents on a daily basis. Firstly, that students know that, when contacting their parents, they can surpass the authority of the teacher and the school. Secondly, this event shows that parents also support the way their children behaved to coordinate their exit. This practice, in a context like this, is problematic for the school and teachers to handle. In fact, the teacher who came in after Orientation took us all outside the classroom

and the chaos was visible. This was especially visible in the school entrance, where students were ready with their backpack waiting for their parents, while staff were trying to keep everyone calm. Parents were also shouting through the door the names of their children or making eye-contact with them, making it clear that they were contacted before anyone in the school knew about their presence there.

Even though this particular event is an unusual emergency, overall, the event shows that mobile phones have acquired a safety role for students, which is beyond school and teacher jurisdiction. Part of this issue was also partly addressed in Chapter 5, which addresses how parents get involved in issues related to phone misuse in school-related events (section 5.3.1.).

Teachers report that they feel the pressure from parents who allow their children to use their mobile phone. They believe that parents, not only students, are being disrespectful sometimes because they communicate with their children in class hours. Teachers also report that they put some limits to students' intentions in classes regarding this because they know that students could only be using this as a strategy. However, some teachers also understand that for some students this could be the only communication of the day with their parents, who work until very late.

Obviously, the parents in the /parents/ meeting emphasise why, for instance, once a dad said "forbid it and if you catch him, take the phone away from him, and suspend him", but you have to understand that there are parents whose only contact with their children during the whole day is through their mobile phone. (Biology teacher, Vite school)

The parents call their children in the middle of the class hour and their mobile phone rings and then /he/ [student] tells me "teacher, my mum is calling", "but if it's urgent, from here, you can't do anything, [she] should call an adult at the *inspectoría* (Behaviour Department)", "so you keep calm, talk to her for two minutes there in the corner, not in the yard, because we both are going to be told off, because this shouldn't be done and tell your mum that you are in classes, show her your schedule". (Chemistry teacher, Alte school)

As mentioned by the teachers and observed in some classes, students ask for permission or assume that permission will be granted if they are using their phones for family issues, which commonly involves sending or receiving messages.

Alfredo: For example, I can go in the break and say "I have to call my dad, I have a problem" And I call him, but for example, in the classroom, um, for example in History I couldn't because the class is always in silence and... [somebody laugh].

Constanza: the thing is that there are teachers, for example teacher J or teacher P that if it is an emergency, if your mum is calling and you know it is important...

Rosa-Maria: ...they let you go out.

Constanza: They let you to go out and talk to your mum.

(Group interview, direct participants, Vite school).

Students are not very critical of communication with their parents in classes. It does not bother them that they are texting during lessons. However, for some students, their parents sometimes put a bit of extra pressure on them by asking them to keep in touch, being impatient when expecting a reply or texting them about non-school- or family-related things.

Have you ever left your phone at home? (...)

M1: horrible, and moreover I am told off [at home]: “Why do you have a phone if you are not taking it with you?”

(..)

Is it frequent for your family to care about messages?

M2: yes (..)

M3: the other day my mum was asking me whether I had the number for a restaurant.

In classes?

M3: [he nods]

Do they [parents] get upset if you do not answer?

W1: yes

NN: yeess

(Group interview, mixed, Alte school)

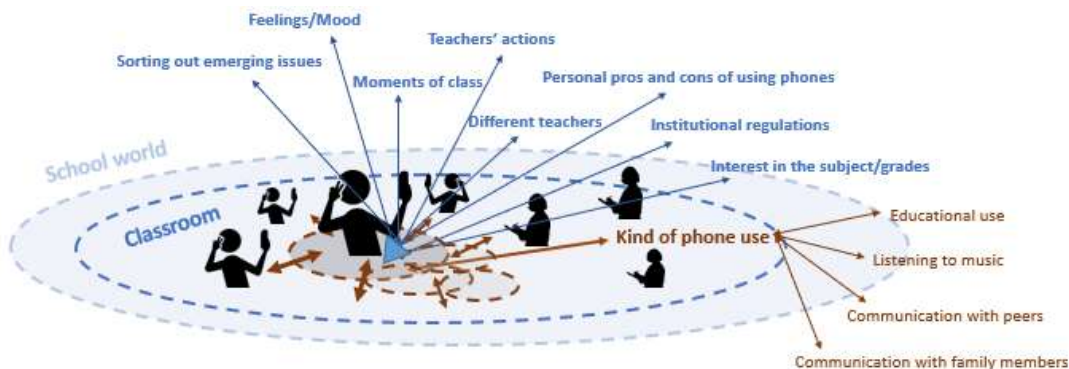
Overall, some students like to be in contact with their family, especially to coordinate their exit from school, which is a common practice in both schools. In Chile, this is called *retiros*. It refers to the act of leaving the school early in the day, under parental permission. Students claim that sometimes they must go to the dentist or doctor, but also that they want to leave school earlier to have some rest or to work on school homework and school projects. This is particularly problematic in the Alte class. Here, some students additionally report feeling very overwhelmed with the school workload, so one way to deal with this is to leave school earlier to do all the outstanding work and/or revising. During fieldwork, it was common to observe students leaving.

The different kinds of uses explored in this section have shown that students and teachers position themselves in the classroom differently around students’ mobile phones depending on how they are used. Students negotiate their use more overtly when it is about parents’ communication, or in the case of some educational uses because there are more chances of getting their way. Other uses are more accepted by teachers, such as taking pictures of the whiteboard or listening to music, but there is no full agreement among them. Uses related to communication with peers, on the other hand, are mostly done surreptitiously because there are almost no chances of teachers accepting them. However, students do not appear to be constantly disengaged from school activities. With their phones, students are sometimes supporting their class activities or open a channel to contact friends

that are going through similar class experiences. At the same time, phone use enables them to access a space of support and safety from peers and parents. Thus, the negotiation of phone use in both schools is an interconnected process that differs depending on phone uses; therefore, participants' phone use cannot be regarded as a compact and single negotiated practice.

Figure 6.2. summarises the aspects (resources) participants are considering in their phone use in the classroom. Their negotiation, although some students will claim it is an individual responsibility (section 6.2.), has collective aspects in which students are reading their context; for example, how they feel in classes, differences among teachers, and institutional changes. There, they see options for using their phones. However, students' answer to the dynamic class context is different depending on the use they are giving or want to give to their phones and, therefore, their relationship with teachers changes around them.

Figure 6.2.: Different aspects involved in the negotiation of students' phone use in the classroom



6.4. Chapter summary

This chapter addressed the second research question about how teenagers are negotiating their phone use in the classroom. The analysis was mainly based on students' interviews and class observations. Some teachers' interview data, however, makes it possible to focus on the relationship between teachers and students around the use of phones in classes.

The chapter showed that students are taking into considerations different elements of their classes: how they feel in classes, moments of the class, their interest and personal situation in each subject, and teachers' actions in the present and over time. These different elements or *cultural resources* (Holland et al., 1998) provide a basis for students to know how, when, and with whom they can use their phones. Participants do not want to stop using their phones and know that could be a problem for teachers. However, in reading the class context, virtually all of them believe that there are spaces and grounds for phone use that are justified because, for example, it helps them feel better in classes,

there are moments where it is not disruptive, or because teachers also use their own phones. Most students believe that, ultimately, how and when to use their phone is an individual choice. However, I hold that there are collective meanings and ways to negotiate phone use that this chapter has illustrated.

That collective way to negotiate not only has common elements, but also distinctive traits depending on the kind of use students give or expect to give to their phones in classes. Contextual motives for use, and how to approach teachers (and vice-versa) are organised in diverse ways around different phone purposes or uses: educational, listening to music, communication with peers, and communication with parents. Educational phone use has been mainly initiated by students with a practical aim. Web searches, use of calculators, and dictionary, and taking pictures of textbook pages or the whiteboard are negotiated on a daily basis with teachers. Listening to music is a leisure practice for students which they have managed to incorporate in some moments of the classes (e.g. while solving exercises). It is mainly a response to being bored, stressed, or distracted in classes. Communication with peers is not allowed and it is not directly negotiated with teachers; however, students have managed to keep use it while doing school work. Finally, communication with parents is permitted because of student pressure, passing over teachers' or schools' decisions mainly about students leaving school early because of emergencies, appointments, or workload-related stress.

In this context, phone use is multi-dimensional and cannot be seen as a single and compact practice that is contested by the school and negotiated by students and teachers. Phone use appears to be related to different aspects of participants' lives such as studies, relationships with peers, leisure, and family relations. In some respects, in crossing and pushing boundaries between their school work and everyday aspects, participants have been able sometimes to get their way, not necessarily respecting teachers' decisions or guidelines. However, it is also possible to see that students are accessing and performing ways of studying that resemble what they do outside the classroom, such as using pictures and sounds, listening to music, and interacting with other peers. Moreover, in connection with this, participants benefit from a school-based support and safety link with peers outside and inside the school, as well as with parents, all of which helps them tackle some of their feelings of boredom and excitement that participants identify as part of their daily life at school.

Chapter 7: The orchestration of positionalities around the use of mobile phones in school

Focusing on five students from both schools, this chapter explores different ways of being when using mobile phones in school, and their possibilities for using them regarding their position in school. It also delves into strategies (Chapter 6) used by these five students using their phones in school in distinctive ways.

Thus, the chapter addresses the third research question on the orchestration of positionalities in teenagers' mobile phone use. Particularly, it explores positional identities (Holland et al., 1998), emphasising the relational aspect of these five students' phone use in school as teenagers and students. This includes the way they see themselves and their use in context, how others see them, and how the five students found their own way of relating to different people online and offline (peers, teachers, and family members). In this regard, this chapter explores the individual level of the overlap of their everyday lives with the school world in the phone use. In other words, this chapter adds a new layer to the interconnected phenomenon of students' phone use in school –the individual– and makes it possible to observe some elements presented in prior sections from a different point of view.

7.1. Ways of being associated to mobile phone use

During the first half of the group interviews, participants were invited to look at a list of practices connected with mobile phones observed in fieldwork (section 4.4.2.3.). The first instruction was to select the practices that better describe each aspect of their individual daily phone use at school. In each group interview, I could hear them saying things like: “that’s classic Camilo”, “oh, that one was me”, “Take this one, that is yours”, or “that group does that all the time”.

In the process of discussing the observed practices with them, there was a set about which it is possible to say “everyone does it”. They can basically be grouped into the main practices analysed in the previous chapter: educational, communication, and entertainment. However, delving into those practices, the analysis showed that phone use is associated to ways of being in the school. In other words, certain practices are associated to certain individuals or groups. For example, students can identify who uses the phone more for certain things, for whom it is easier to use their phone in class without being caught, and who can have problems with their peers because of something related to their use of this device. Moreover, the analysis of individual interviews also shed light on how students read the school world and how they interact with peers and teachers when using their mobile phones.

Thus, there are also certain ways of using phones related to certain positions in this particular context. Finally, other classmates are able to identify and reinforce this relational self-understanding (Holland et al., 1998).

The following quotes exemplify this idea of distinguishing different people, as well as the overlap of daily life with the school world as young people and students use their phone in school.

...the teachers know who they can let use mobile phones, and who they can't, even in our class. For example, if they see P using her mobile phone [best student in the class], it is obvious that it is not that P is playing a game, she must be doing something reasonable, but if they see M using the phone in class, it is not like he is looking for the meaning of a word... (Constanza, initial interview, Vite school)

Do you think that mobile phones play an important role in the way you are in the school?

Yes, I believe so.

In what way?

Because I feel that everyone in the class has his/her..., I dunno, A spends all the time sleeping, you know, F with her friends, it is like her group of friends... who love each other, they spend time putting make up on, things like that, you know, I feel... I am... I don't know how to say it...

Different?

Yes, sure, I feel like if I weren't on my mobile phone all the time, I wouldn't be me. You know, I wouldn't be sending things. (...) I am the one who always sends really boring memes, you know, very dull jokes, but I find them fuuuunny. (Antonia, final interview, Alte school)

This does not mean that phone use turns students into something specific, but that it leads them to discover ways to participate in the school setting with others, while also opening or closing opportunities of increasing or reducing their mobile phone use or interacting with peers or staff in specific ways.

The following pages will present 5 individual cases (see about case selection in section 4.5.2.5.) from both schools to delve into (possible) ways of being in the school regarding the use of mobile phones.

7.2. Five individual ways of using mobile phones in Alte and Vite school

The experiences, practices and perceptions of five students –Mario, Antonia, Vicho, Rosa-Maria and Simona (table. 7.1.)– concerning their use of mobile phones will be presented in the following section. Each of them shows a different way of being at school in connection to managing their phone use and being successful or unsuccessful in that purpose. In that daily use, they show diverse ways of interacting with others that are key to understanding the ways they are and how they position themselves in school. These individual cases are based on students' interviews and observational data in the form of individual "narrative composites" (section 4.6.2.4.; Appendix L).

Table 7.1. serves as an introduction to all the cases. Not all the topics addressed there will be covered in the individual portraits. The idea is not to compare cases, but to show different ways of participation and interaction around phone use while also reflecting on the particularities of individual and collective practices the students are involved in.

Table 7.1.: Key personal and phone use aspects of five individual cases.

	School	Personal interests	Activities in school	Relationship with peers and teachers	Mobile phone use ²⁰
Mario	Alte	Going out with friends, outdoors life, doing sports (basketball mostly), and anime.	Secretary of his class, President of the school students committee.	Friendly, sociable and popular. Likes to play pranks on friends. Good relationship with teachers.	High phone use, overt during breaks and hidden during classes.
Antonia	Alte	Reading, playing guitar, attending cultural activities, participation in Facebook groups.	Critical and politically involved. She has been in the students' committee. She is a member of the school's cheerleading team.	She has close friends inside and outside school. Good relationship with teachers, although it can get tense with some of them because of her critical side.	Intense phone use. This causes some tensions with teachers and peers.
Vicho	Alte	Drawing, painting, poetry, anime, and video games.	He wants to study Art, so he does not see the point in putting too much effort into traditional subjects and grades.	Friends from his class are what he likes the most about the school. Feels close to only one teacher in the school (Physical Education).	Medium phone use, mainly with school friends. He does not have Internet access.
Rosa-Maria	Vite	Reading, writing, and music. She defines herself as a 'fan girl'.	She likes to come to school and learn new things. She is one of the best students in her class.	Part of a big group of friends in her class with common interests. Good relationship with teachers.	High phone use. Important for personal and collective purposes.
Simona	Vite	Fashion, playing games on her iPad, and video games on consoles.	She is concerned about being a good student and not being told off. She is the class treasurer.	Transitioning from one group of friends to another. Formal relationship with teachers.	Hidden, low phone use at school. Mostly to stay in contact with her mum.

²⁰ The levels are based on observational data and comparisons between selected cases. The purpose is to provide a sense of the differences between them. The exact use frequency cannot be reported, and it is important to remember that participants display a high and continuous phone use.

7.2.1. Mario

Mario is a 15-year-old male student. He is an energetic person, who enjoys sports and outdoors life. In school, he is quite restless, especially during breaks. Some days he plays basketball. Other days he moves across classrooms and areas in the school with friends from his class or his best friend V from the other Year-11 group.

He is also a friendly person and very popular among younger girls. He likes to brag about his accomplishments and plays pranks on friends and classmates. During fieldwork, he was known in the school because he was the President of the Students Committee and had a YouTube channel on outdoors activities during the first semester (March-July).

Mario reports he has good relationship with teachers and some school authorities. As an example, he mentions that he can discuss personal topics with some teachers, such as the girls he likes.

Mario: okay, an example... with teacher U... I showed him some time ago [a photo of] the girl I like.

Ev: hahaha

Agustina: classic Mario.


Vicho: [inaudible] he will be your best man.

(Group interview, direct participants, Alte school)

7.2.1.1. Strategic mobile phone use

Mario uses his mobile phone a great deal at school. In this use, you can see his friendly side on display and also a strategic side. Basically, his communication through the phone during school hours is with other students who are inside or outside school on WhatsApp. From inside the school, he is generally texting his best friend in the other Year 11 class (V), and girls from lower levels.

The following dialogue is an excerpt from a conversation with his best friend (V) while in class. V's birthday is coming soon, and V is asking Mario what their common friends are planning to do for his birthday. Mario tells him, although it is supposed to be a surprise.

<p>Participant: Mario Friend involved: V, best friend. Start time: 8.02 am Platform: Whatsapp, chat group only with V.</p>	
	<p>V: but are they going to do something?</p> <p>Mario: it seems so, C told me in the morning.</p> <p>V: Cool, ask how they're gonna do it. I will really <i>stay</i> zzzzz (I won't tell anyone).</p> <p>Mario: hahaha, ok ok.</p> <p style="padding-left: 40px;">They will take you out for dinner.</p> <p>V: Aaah, where?</p> <p>Mario: <i>Zzapi huy</i> (Pizza Hut)</p> <p style="padding-left: 40px;">Hut*</p> <p>V: after classes?</p> <p>Mario: it seems so.</p>

During breaks, his use of mobile phones is visible. Most of the time, he is texting by himself or sharing messages with V (e.g. Day 14a). He explains he does not use his phone much with friends from his class because when they get together, they prefer playing basketball or football.

During classes, his phone use is almost invisible. He appears as someone very respectful of classes, especially when the teachers are delivering content. However, his phone use is high. It is just that he knows how to avoid being seen or told off by teachers. In the interviews, he admits that he has some techniques to use it inside the classroom.

Mario: (...) I'm always vigilant with... I have my phone on my desk, I unlock it quickly, so the teacher doesn't see me, I lower the screen brightness, and like I put it in the case so it is not seen how I reply to messages.

And you sit in front...

Vicho: the most impressive /thing/ is that he puts down the brightness and put his cap like this [he shows how Mario adjusts his cap] (...) the cap, he puts it like this [like he faces the brim in a way the teacher cannot see].

Mario: like, when the teacher passes by, I like start to play with it [the cap], like I handle it like this [he shows me how], I twist it, and because it has no brightness [the phone] you can't tell. These are techniques for those at the back [pointing to the back of the room, pretending he is in front of an audience].

(Group interview, direct participants, Alte school)

This quote shows that he enjoys using his phone or doing things that are not allowed in classes and still avoids being caught. Moreover, he sits in the front row, almost a meter from the whiteboard. It is like a statement that he can do it, that he can handle being in classes. His tactics for using his mobile

phone not only include avoiding being seen, but also putting somebody else in the spotlight if necessary, as shown in the next confession.

Mario: I must confess something... that once I was sending a message and it [phone] started to ring “tin, tin, tin”.
Antonia & Agustina: Yes! That was you! [blaming tone].
Agustina: yes, we knew.
Mario: yes, haha.
Antonia: bastard... and he [the teacher] took mine away [her phone].
Mario: I was like [hiding it] and the message wasn’t sent, and I tapped several times and the sound of the audio message started to ring. (...)
Antonia: bastard [resentful, but not serious].
Agustina: *que eri...* (you are mean).
Mario: and then, I put it away and put it in my backpack. It was because the teacher was upset, and I needed to save myself.
(Group interview, direct participants, Alte school)

Because his classmates are telling him “we knew”, it is possible to infer that he is the kind of person who might do that. It does not look like he wants to provoke his friends: it is more like a personal challenge to get his own way and keep working on his self-understanding as a good student.

In general terms, his mobile phone use is successful in classes, although he admits he can be restless and his phone is confiscated fairly often. However, like he says, his good relationship with some teachers allows him to get his phone back.

Has it been taken from you?

Yes, Teacher U does it a lot, but gives it back to me because I have a good relationship with him: “...but come on Mario, I was explaining something to you”, but I’m like “But teacher, I had finished the worksheet”. For example, he took it from me last week and I said to him: “Teacher, I was doing the worksheet, [but] then I finished”, I had nothing else to do and I was on my phone. (Mario, initial interview, Alte school)

Mario has also challenged his position as a good student when he has shared pictures or memes related to teachers, even though he does not seem to be fully aware of the risks. He reports that he once sent a meme to a Whatsapp group of school friends because they were talking about the cartoon character *He-man* and that reminded them of a certain teacher. He says this is quite common among them; however, this time his friends gave him a taste of his own medicine. The following quote depicts this situation and how Mario is immediately thinking of a way to get out of the alleged problem he got into.

...and everyone said “Noo, she looks like...” [teacher in a meme], and one day they say to me: “hey, Mario, we have a problem because somebody shared your photo” (...) And then they told me: “Hey, teacher L saw the photo” and I said: “ohhh, I just sent the photo and I didn’t mean to bother her” and they told me somebody would come looking for me. (...) so, I told myself “I will have to admit it, say sorry.” (...) and then they told me “No, it was a joke” and I was like “Ohhhh!”. I was making up all the things I was going to say in my head, I had... the speech done. (Mario, initial interview, Alte school)

7.2.2. Antonia

Antonia is a 15-year-old young woman. She describes herself as a critical, participative, stubborn, and informed person. She has a political side that is visible, for example, in the kind of books she likes and her knowledge about the Chilean educational system. She is also interested in having a social and active lifestyle; for example, she goes to the gym twice a week and enjoys going out to cultural activities in the city with friends and her boyfriend.

Overall, Antonia has a good relationship with teachers and school authorities. As she explains, she is not confrontational. However, her political and critical side has caused her to have some issues with some school officials, but not with teachers.

I feel I have a good relationship with teachers, because I have never been into arguing too much, like, in a bad way, you know... I discuss things a lot, I am argumentative in that regard, but not in a bad way. (Antonia, final interview, Alte school)


7.2.2.1. Problematic mobile phone use

Antonia, among all the direct participants in the study, is the one who uses her mobile phone the most, and it is her most visible activity in school. She is also the only one who reported having rules at home for her phone use at night: her parents take her phone from 11pm until the next day on week days to ensure she has a healthy sleeping routine.

In school, she spends almost all the time (breaks and classes) texting or checking messages, and she is known for this among her classmates.

Agustina: no, not you, you use it all day.
Mario: you in here [school], at home, in the toilet, in the kitchen, in the beach...
Antonia: nooo, hahaha.
Mario: ...underwater with... /if/ I had a waterproof case, you /would/ ask him for it.
Antonia: haha, it is not a big deal.
Mario: nooo [ironic].
Antonia: the thing is... that is different because... because Agustina spends more time talking with people in the school, inside the school. I have more relationships outside [with people outside]. (...)
Mario: yeah, yeah [ironic]
Antonia: but that does not justify it, I know [resigned tone].
(Group Interview, direct participants, Alte school)

The quote shows that Antonia is aware that her intense use can be “too much”, but she justifies it based on her need to keep in touch with people outside school. In the interviews, she describes that almost all of her phone use at school is to communicate with people outside school, such as her mum and boyfriend, but mostly friends or new acquaintances on Facebook groups. The following extract presents a conversation between Antonia and a Colombian friend she met on a Facebook group. This person later became a closer friend and started to have WhatsApp conversations with Antonia. They have never met in person.

<p>Participant: Antonia Friend involved: friend from Colombia Start time: 11:24 am Platform: WhatsApp, chat group <i>Amiga</i> (Girlfriend)</p>	
	<p>F (friend): I did not have classes.</p> <p>Antonia: Whatssss [What?]</p> <p>Why? [emoticon]</p> <p>F: Teachers’ union session.</p> <p>Antonia: And what is that about?</p> <p>F: It is a meeting organised by all the teachers from the <i>departamento</i> [region] or at least from the city.</p> <p>Antonia: That’s cool.</p> <p>Friend: there they talk about how bad their pay is [emoticons]</p> <p>Antonia: <i>Paaaasaa</i> (Shit happens) [emoticon]</p> <p>Friend: [emoticons]</p> <p>Why you didn’t go?</p>

In her mobile phone use at school, Antonia has some tensions with teachers. In classes, she is frequently distracted, and teachers often tell her off or ask her to put her phone away. She generally checks messages or texts under the table, but in other moments she does so openly. The fact that Mario has used Antonia to avoid being caught by teachers (section 7.2.1.1.) shows the kind of position she has within the class. Despite this, Antonia describes her relationship with teachers as good. She is aware that her intense mobile phone use could be a problem for them, but she thinks her non-provocative attitude plays to her advantage in classes.

"...I remember once that it was taken from me in Geometry classes, (...) the teacher thought it was a game... and nooooo, so he took it from me and after the break, I went to see him, "but you were playing" and said to him "No, it's my lock screen photo" [like weeping] and I showed to him and said "okay, take it". I have never had a bad vibe with the teachers in that regard.

I was about to ask you that (...)

(...), I am not like those people who say, "Give me your mobile phone", "No!".

Ah, other people do that?

For example, IF does. IF is like the one who's like "Give me your mobile phone", "No, it's mine and you are stealing it from me", things like that. Then, I'd rather not make a fuss. So, I give it [to the teacher] and then at the end, "Profe (teacher), can you give it to me? Please?", "Yes, take it". (Antonia, initial interview, Alte school)

In her phone use, Antonia does not use tactics to hide it, nor does she look for excitement, unlike Mario. Her strategies come after she is caught, taking advantage of a good reaction or a nice way to ask for things to avoid confiscation or retrieving her phone. For example, once she gave a chocolate bar to the Physics teacher as a way to say sorry for her behaviour.

So, Antonia's position in classes is not one of a student who is paying attention all the time. Nevertheless, she is not totally absent from school activities. She is a member the school cheerleading team and has been in the Students Committee. Moreover, she can get engaged in classes when issues around schooling or the Educational system come up (Day 15a). Thus, Antonia is committed to the school, despite being very distracted in classes.

Another duality in Antonia's life is present in her social life. As mentioned, her intense phone use at school is because she is communicating with out-of-school friends. However, this intense use sometimes plays against her in their offline in-school relationships. I often observed her closest friends, who also use their phones a lot, asking her to "come back" to their conversations. It is also common to see Antonia in breaks or in-class breaks texting and one of her friends poking her for attention or taking her mobile phone as a prank.

Day 14 of observation, Alte school

Extract, Break (9.45-10.00 am), inside the classroom

Antonia stays in the classroom, checking her phone. IM approaches Antonia, who is engrossed in her phone. IM pokes Antonia, sits next to her, and even asks her what is wrong. Antonia, after a while, pays some attention and they talk about something I cannot hear. After a while, IM leaves Antonia alone for a couple of minutes and then comes back. She sits next to Antonia again. They check something together in Antonia's Biology notebook [they have an exam later that day].

Antonia also says that it is common for her friends to tell her off due to her intense mobile phone use and warn her of its possible consequences for her studies.

...they [friends] use it too! but it is just that they are talking to me and I am using the mobile, but I am listening to them, but they say “No, pay attention to me!”, “When I finish using the phone, I’ll talk to you”, you see, things like that. Anyway, I still believe that we are using our mobiles all day. I mean, IM is using it all day, you know, it is more for important things like “Antonia! Pay attention to this because you don’t know anything and, in the test, you will get a low grade again”, and I am using the mobile. (Antonia, final interview, Alte school)

Antonia admits that her use can be excessive and her grades have dropped a bit, but she feels confident that she will improve them by the end of the year. She is studying more, but she is not planning to reduce her phone use.

7.2.3. Vicho

Vicho is 16 years old. He defines himself as an artist engaged in a variety of painting techniques and a poet. He also enjoys video games.

In school, he is very quiet. He is not very participative, neither in classes nor in the school. However, he gets involved in some spaces that allow him to display his artistic side, such as Arts classes or the decoration team for the Chilean National Celebration activities (Day 3a).

He admits he does not like school, except for the fact that his friends are there and he gets along well with some teachers. He also says that he is not engaged in classes because he does not want to go to university. He wants to study Art elsewhere, hopefully abroad.

“What don’t I like about school?” ... To come to, let’s see, how do I explain this... to pay attention to something I am not interested in, you know, but I have to do it anyway. (...) I am not like the “majority of the class”, who are really in the class, but they start doing a *Monkey’s birthday*’ [mess] so the teacher....[pause]

Trying not to be seen?

Yes, (...) I start talking, but just to the person next to me, you know, or I just don’t talk, I draw, or do anything.... But what... I don’t like about school is what I’m saying, having to pay attention to something that I know won’t be useful. (Vicho, final interview, Alte school)

7.2.3.1. *Intimate and collective mobile phone use*

Vicho has had no Internet access in his phone since the beginning of the year. For him, this is not a real problem in terms of interacting with friends inside school. He says that sometimes he connects to the school wifi (at the school foyer) or borrows one of his friends’ connection. The latter is the most common choice for him, and he does this to share something with school friends or contact his mum.

/I am limited/ by the /availability of/ wifi or borrowing.

Is it common to share [Internet access]?

Yes, in general, especially among my group of friends, we share a lot.

For a short while?

No, we can be shameless, but just once in a while. (Vicho, initial interview, Alte school)

His phone use is also related to his disaffection towards school. He reports he likes using his phone for distraction, in some ways to get away from what is taking place in classes. Therefore, he also admits that he does not feel he needs Internet all the time. He uploads manga on his phone at home and brings it to school, or even brings a notebook to draw when he is distracted.

You know, there are some days when I put my earphones and I disconnect myself from everything, I start reading, or playing, or reading manga. These are the times I use my mobile phone at school. (Vicho, initial interview, Alte school)

In classes, it is common to see Vicho and his friends being very quiet and still. They are rarely told off by teachers, especially Vicho, who is really calm and quiet. Even though they look engaged, actually they are not paying much attention, but listening to music individually.

Day 5 of observation, Alte school

Extract, History lesson (8.15 – 9.00 am)

Vicho is sitting in one of the middle rows. He moved from his usual seat at the back (same row) to sit next to BE (...) He is wearing earphones in one ear. He is wearing it on the side that is less visible from the teachers' location. During the whole class, he has been quiet, taking notes. I did not even see him talking to his friend next to him.

Like Vicho, his friends in the group interview (mixed), report paying attention to the classes they like the most, and some of them say they are able to listen to music at the same time. Vicho adds that for him things like listening to music or checking his phone allow him to keep focus, especially in moments during classes when they must work individually or in groups.

Vicho: it's... yes, it's not, for example, if you are studying and you have your phone next to you...

Mario: [interrupting] you get distracted.

Vicho: yes, you get distracted, but in my case it's not like that because, generally, if I don't have anything next to me, I get more distracted. So, if I'm paying attention to the phone or listening to music [Not audible], I would be doing something at the same time, I am doing something else.

(Group interview, direct participants, Alte school)

In the group interview (direct participants), when the time came for Vicho to select his more frequent mobile phone practices, he selected one piece of paper that was not picked up by anyone else: playing (video) games. This practice is recognised by himself and others in the class as something that describes Vicho's group of friends.

M1: (...) for example, you know, I went to the guys and it's always "ohhh, did you see this video? And we are like "oh, let's see it" and we form a group, we all see it.

Okay, that is common.

M1: yes, a lot, but there is this other group [Vicho's group] and they do this all the time...

M2: ...and they play, play, play.

M3: and *grrrrr*.

M1: they do it as a group.

(Group interview, boys, Alte school)

Thus, while in classes listening to music is the main activity among Vicho's group of friends, it is during breaks or at lunchtime²¹—or when "[teachers] say 'Do what you want' and everyone pulls out their phones" (Vicho, Final interview)—that their phones come out in force for him and friends. The whole group gather in one side of the room, sitting on their desks, and they start chatting. Their conversation is based on information (photos, messages, and videos) retrieved from phones, or games they are playing individually or collectively. Even if they are doing different things individually, they chat at the same time, and share what they are doing. You can see them at some points talking all together looking at somebody's phone screen. The next second, you can see pairs of them doing one thing while one of them does another.

Day 4 of observation, Alte school

Extract, Lunchtime in the classroom (13.15 – 14.10 pm)

Vicho and his friends (BE, F, PO, RO) are playing games on their phones. One of them is using Vicho's phone. Vicho and the others are playing and looking at BE's phone. Meanwhile, some of them are wearing earphones in one ear. BE is playing guitar next to them. At some point, BE asks Vicho for his phone to look for a guitar tab to play his guitar.

Thus, Vicho's individual disengagement from school activities is also a collective trait among his group of friends. In his (their) phone use, they manage to escape and find entertainment in classes, mainly listening to music, while in breaks or dead times their interactions are mediated by phone-based multimedia resources, which has become a distinctive trait within his class.

²¹ In Alte school, students from Year 10 onwards do not need to have lunch at the school diner.

7.2.4. Rosa-Maria

Rosa-Maria is a 16-year-old female student from Vite school. She is one of the most able students in her class. She portrays herself as a distracted and lazy person, always with her mind on multiple things, but you can tell she is a focused and ambitious person, especially about school and grades.

Rosa-Maria is part of a big group of female students in her class. All of them have varied interests and hobbies related to books, writing fan fiction, anime, video games, and music. They define themselves as fangirls, and Rosa-Maria is the one who shares the whole spectrum of interests in the group.

W1: we are fangirls.
W2 & W1: *geekys* [in English in the original] (...)
W2: It depends because... the thing is that this group is the union of three different groups. (...)
W2: um, at the beginning, the thing is, Rosa-Maria is a special case because Rosa-Maria is part of all the groups, it is like our gum.
W3: our glue. (...)
W2: for example, there is the group of the readers, who spend all the time reading books, those are Constanza, Rosa-Maria, P, and me. Then, it is A's group.
W3: [A]: *Otaku!*
W2: yes, thank you.
W1: but, she is also part of the readers a bit (...)
W2: ...I watch anime as well.
W1: me too, Rosa-Maria too. The one who does not do that is Constanza (...)
And you? [addressing Constanza]
W2: you are with the *fashion* [in English in the original] ... in a good sense.”
(Group interview, girls, Vite school).

7.2.4.1. Controlled mobile phone use

Rosa-Maria's phone use is related to interactions and communication with her group of friends at school and outside school. Her digital practices are more visible during breaks and lunch breaks. As Vicho in Alte school, Rosa-Maria spends much of her time interacting with her school friends around personal interests. In the case of Rosa-Maria, it is possible to add also that they do homework together using their phones in breaks or dead times.

At lunchtime, all the group sit together on one side of the table assigned for Year 11²². They always sit at the same side of the table. In those moments, it is very common, especially for Rosa-Maria, to start

²² In Vite school, each level and class have assigned a specific table in the diner. Students cannot leave the diner until lunchtime is over.

working of projects related to their interests, such as writing stories. It is also common for them to use their phones to look for information to back up or open (new) topics of conversations.

Day 11 of observation, Vite school

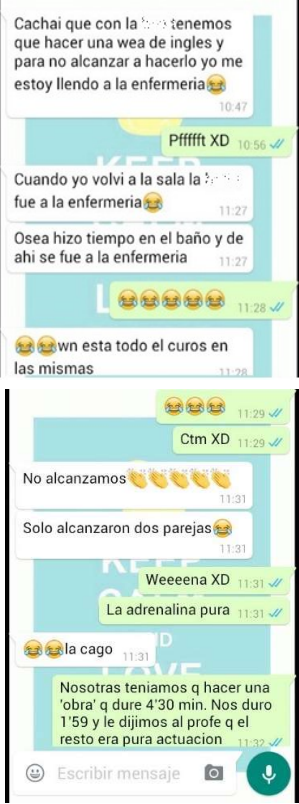
Extract, Lunchtime at the diner (13.10 – 13.55 pm).

Rosa-Maria is sitting at the designated table for Year 11 in the school diner. She is with almost all her group of friends (Constanza, PO, PA, MON, Simona, ST, and SCK) and JJ. All of them take their phone out while having lunch. Rosa-Maria is also writing some notes on a notebook. There are drawings, and on each page, there is a different map.

Rosa-Maria shows a map of United States on her phone to Constanza and MON and asks them which state they would like to be. Rosa-Maria is creating characters for the novel she is writing. The characters are inspired by her friends.

These kinds of interactions around phones as a group can be seen in the classroom sometimes; on other occasions, like they admit in the interviews, they can text each other in classes to avoid being caught. There is also sometimes individual phone use by Rosa-Maria and her friends, mostly for reading pdf-novels or fanfiction on applications, such as Wattpad.

Alongside this collective use of mobile phones, Rosa-Maria keeps constant communication with friends outside school through WhatsApp, especially her friend VA, who is her same age, but attends another school. Sometimes what they discuss online is shared by Rosa-Maria with her friends at school because they are going through similar things or studying the same content. The following online dialogue between VA and Rosa-Maria was shared and discussed with school friends on one break during fieldwork (Day 6v).

<p>Participant: Rosa-Maria</p> <p>Friend involved: VA (outside school)</p> <p>Start time: 10.47 am</p> <p>Platform: WhatsApp, chat group (only with VA)</p>	
	<p>VA: you know, with B we have to do a thing for English and to avoid doing it, I am going to the Infirmary [emoticon]</p> <p>Rosa-Maria: Pffff, XD</p> <p>VA: When I came back to the classroom B was at the Infirmary.</p> <p>I mean, she stayed a while in the loo and then she went to the infirmary.</p> <p>Rosa-Maria: [emoticons]</p> <p>VA: [emoticons] the whole class doing the same thing.</p> <p>Rosa-Maria: [emoticons]</p> <p>[cursing] XD</p> <p>VA: We couldn't make it [emoticons]</p> <p>Only two couples did it [emoticon]</p> <p>Rosa-Maria: goood XD</p> <p>Pure adrenaline</p> <p>VA: [emoticon] no joke</p>

In classes, Rosa-Maria can be described as someone who knows how to use her mobile, while having a privileged position. She is one of the best students in her class, she is disciplined and quiet in classes, so she has a good relationship with teachers. Other classmates see her as the expert in English and the person to ask about other subjects when they are lost. She is aware of her position in her class and her personal tactics to use her phone are built on this privileged position.

I see myself as a good student, who pays attention, who does not always do homework, but who is honest, I mean, I do not cheat if I didn't do my homework. If I didn't do it and just submit what I did. I respect the teachers to a certain extent, but when I am upset, *los pelo* (I talk behind their backs) and everything. Thus, I have good grades. I see myself as a good student, so I have more advantages to use technologies in classes, because teachers know I am not, I am not going to make a mess and all that stuff. (Rosa-Maria, final interview, Vite school)

Thus, one strategy it is just to assume that she gets preferential treatment and using it showing respect for teachers. For example, sometimes she uses her phone when she knows it should not be a problem for her and the teacher.

(...) ...not that I remember being told off because I use my phone, because I use it when I'm free or after finishing an exam [they stay in the classroom], so everybody is still doing it, the test, so I don't have anything to do. Sometimes I forget to bring books [for reading] to school.

But do you ask the teacher for permission in that case?

Not really. It is almost certain that the teacher knows that I am using the phone, what for, because the teachers can suspect that I am sending answers hidden there, so I am using [just] there, using the phone, until the teacher passes by and I talk to her, and you know. (Rosa-Maria, initial interview, Vite school)

It is possible to connect Rosa-Maria's strategies with her awareness of the class she is in. During the interviews, she often reported how difficult her class was, especially a group of male students who are constantly challenging teachers and disrupting the lessons. In that context, being a good and respectful student allows her to do things that other classmates cannot do.

7.2.5. Simona

Simona is a 16-year-old female student. She is hardworking, organised, and a bit of a perfectionist. At school she behaves well, is quiet, and gets good grades. She was selected by her classmates as the class treasurer because of her organisational skills.

It could be said that she is concerned about how other people see her. She is easily embarrassed, for example, when forgetting to reply to one of my text messages (initial interview), or when the Language teacher proposed students to post a film review online (Day 9v): "Can I upload it under a pseudonym" (Simona, fieldnotes, Day 9v).

Simona does not have a close relationship with the teachers, but she is concerned about behaving well in classes and working on that self-understanding.

What do you call this?... like respect, respecting others is very important to me, respecting others, teachers. All that stuff when you are in classes, it is super important because if you aren't quiet, the rest can't hear either... (Simona, final interview, Vite school).

7.2.5.1. Adjusting her mobile phone use

Simona's phone use in school is visibly low. She is probably the only person like this in her class, where phone use is very intense and mostly men are constantly challenging teachers with their phone use and other behaviours. However, her use of it is not actually *that* low, it is just that it is controlled in terms of how and where she uses her mobile. She is constantly adjusting her phone use to accomplish her desire to be a good student in classes, keep in touch with her parents, and access some entertainment.

In classes, her low use sometimes involves listening to music when students are allowed by the teachers, or texting surreptitiously. She sometimes uses her phone for educational purposes, such as looking for information on words in classes, and in Arts to look for pictures. All these practices are sporadic and done almost "as quickly as possible", unless permitted.

However, Simona confesses that she uses her phone a lot in the toilet to avoid being seen. In this space, as well as in the school in general, the main thing she does with her phone is texting and calling her parents, who are divorced, and especially her mum. With her, Simona coordinates transport or contacts her to tell her things that have happened at school. The following dialogue exemplifies this.

<p>Participant: Simona Person involved: Mother Time: school hours Platform: Whatsapp, chat group with her mother.</p>	
	<p>Mum: Simona remember that today you are taking JM [brother] home by bus.</p> <p>Simona: I know, are you going to your <i>cueca</i> (national dance) classes?</p> <p>Mum: yes, where did you leave the white handkerchief?</p> <p>Simona: on your bed.</p> <p>Muuuuummmm</p> <p>Will you go to the supermarket?</p> <p>Mum; yes, do you want me to buy you anything?</p> <p>Simona: <i>Trencito</i> (brand) chocolate pleeeeeeaaasee.</p> <p>And JM said he also wants one.</p> <p>Mum: ok, be careful when you go home and look both ways when crossing.</p> <p>Simona: I know</p> <p>Love you a lot [four hearts].</p>

For Simona, it is a big issue that a teacher could confiscate her mobile phone, and not being able to have it in case of emergency or transport, as she is also in charge of her brother, who in Year 6 at the same school. She mentions that she uses it little in school in part because once a teacher took it from her when her mum was ill, and she needed to contact her to check who would be picking her and her brother up from school. Moreover, Simona sees herself in a “bad position” inside the class. She thinks that she has bad luck or something that she cannot explain, that in some ways she causes teachers to pay more attention to her; however, this is basically a sign of her sensitivity to the environment surrounding this topic.

...for example Rosa-Maria has some special power and so she can use her mobile like that, in front of the teachers and nobody says anything to her, but if I do something like that, to check the time, and it is like “Ahh!, [erased: her last name], what are you doing!”, and me “nothing”.

Are you afraid?

I am so afraid that it could be taken from me and then I would not be able to retrieve it, and that something would happen.

(Simona, initial interview, Vite school)

In breaks or spare class time, Simona’s phone use is not as low as in classes, but here her concern about losing her phone translates into something different: borrowing other people’s mobile phones or interacting with friends using their phone and not hers. For texting, this is not possible, but for playing games yes, like in the case of the following lunch break.

Day 11 of observation, Vite school

Extract, Lunchtime (13.10 – 13.55 pm)

Simona is sitting in Rosa-Maria’s group at the school diner. Each of them using their mobile phones for different things, while chatting.

Simona is using M’s phone to play a game. She took it from her, but it seems there is no problem. Simona is playing a game by herself.

At some point, she calls somebody from the other side of the table and says “*aha!* (gotcha’) Look at this”, while showing her score to him. She got a better score than him. Staying on the same side of the table, she stands up and starts talking to some boys on the other side of the table about the game. Then, one of them joins her and starts playing the same game on his phone, while Simona watches him play.

However, this scene of Simona’s phone use in school was not that common until some months before in terms of playing games in school with others. During fieldwork, Simona was moving from one group of friends to another. Her former group of friends was interested in fashion and going out with boys, while her new group (Rosa-Maria’s) is more into niche tastes, including gaming (section 7.2.4.). Simona has always liked these things, but as reported in the initial interview, she was a bit ashamed of liking “boyish” things like gaming. In the last interview, Simona acknowledges that in this group transition

she had become more open in sharing who she is with others, which I think was visible in school, including her phone use.

...but now, that I am spending time with Constanza, ST, Rosa-Maria, it's like I have opened more to who I really am. In fact, a lot of people in the class have told me "Hey, I dunno, it's like I can talk to you more now, I dunno". (Simona, final interview)

Simona's phone use forms part of an "adjustment of adjustments" of her way of perceiving her positionalities in school and among her classmates. During fieldwork, Simona reflected quite a lot about how others saw her and, therefore, what was possible for her to do in school, while prioritising her link with her mum. These elements were intersecting in her phone use in school.

This section has portrayed the individual cases of five students from Alte and Vite schools to explore different ways of using mobile phones in school, in which multiple aspects of their daily and school lives intersect. The following section presents some common traits and key insights to understand more about how the participants orchestrate those elements in their relationship with the school context and their relationships with peers, teachers, and family members.

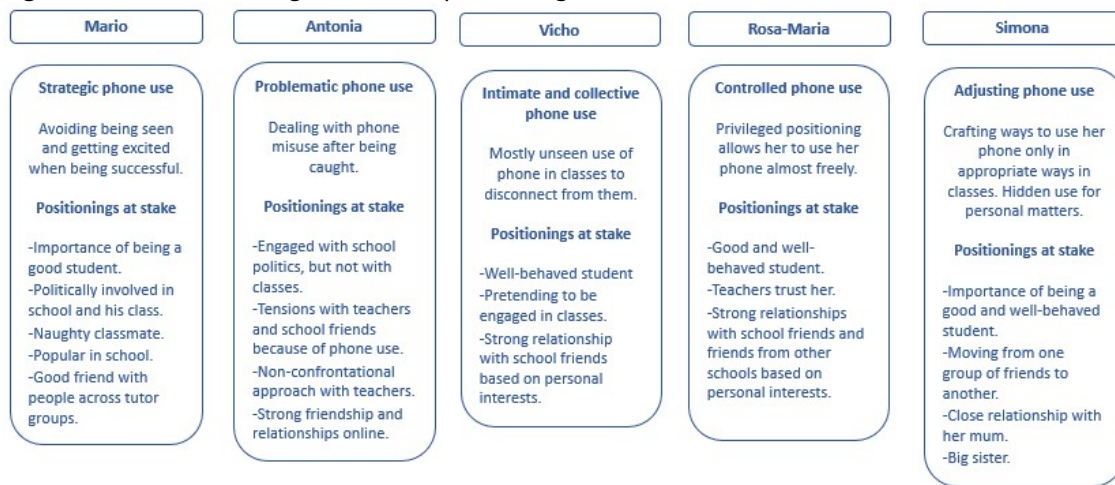
7.3. Positionalities in the use of phones in school

Chapter 6 showed that students consider diverse aspects of their classes and interactions with teachers when using their mobile phones. Students suggested that ultimately it is up to each of them to decide what is the best way to proceed in that respect (section 6.2.). This chapter has revealed that that individual approach exists. Students have their own style of using their phone and avoiding being caught (or dealing with the consequences of being caught). However, these styles or ways of being and acting are not really an isolated act, or actions of self-regulation, as the wishes teachers expressed in chapter 5 (section 5.4). These ways of being and acting are related to their position within school (classes and breaks) and their relationship with teachers, peers, and family in and out of school. In other words, their ways of using mobile phones, as contested practices in school, are connected to how they position themselves within the school as students, friends, and even –in some cases– as daughters/sons.

Those positionings are contextual, and the five cases showed that overlap between being a teenager with friends and personal interests and situations, and being a student more or less engaged in school and classes. The chapter also focused on their mobile phone use in school. Phone use, in this regard,

worked as a window for accessing a point where these two sides are combined. Overall, however, the two sides (teenager and student) are not totally in opposition in any of the cases. Considering that all five students are phone users on a daily basis and that none of them is really totally disengaged from school, it is interesting to have navigated the diverse ways they are combining two sides that are important to them. For example, Mario (figure 7.1.) positioned himself as a good student, popular among teachers and classmates, while also looking for excitement and finding pleasure in not being caught doing “forbidden” things. His phone use results in a hidden practice most of the time, while challenging the boundaries in classes between being a good student and keeping the flow of communication with his peers.

Figure 7.1.: Phone use negotiation and positionings of five students, Vite and Alte school.



Vicho and Rosa-Maria, for example, mainly used their phone in connection with personal and collective interests related to popular and youth culture, such as videogames, manga, and music. However, both of them are positioned very differently in the school and classes. Vicho is not interested in schooling and grades. His disengagement gets to a point where he uses his phone in classes to be disconnected from them, basically listening to music. On the other hand, Rosa-Maria takes advantage of her good grades, good behaviour, and teachers’ trust to use her phone almost anytime she wants in classes and breaks.

The analysis also showed that contradictions or tensions can exist between the participants’ positionings as students and teenagers with their teachers and peers. Probably, Antonia’s case is the most illustrative in this sense. She is very selective of the issues and instances in which she wants to participate in school, such as political debate and student committee activities. However, she also prioritises her online communication with peers out-of-school over being engaged in classes and even in breaks. This has introduced tensions in her relationship with teachers and friends at school, who see her as distracted most of the time. Mario also creates tensions between his desire to keep being

a good student in classes and his friends. Mario is capable of putting his own classmates in the spotlight to avoid being told off or to keep his phone from being confiscated. In the interviews, some students are critical of friends being too engrossed in their mobile phones.

...like a support element, for instance, if you need to look for something on the Internet, or to take pictures of something you didn't manage to copy, I think it is okay, but I don't like that in breaks we are all engrossed in the phone, because actually to me, it's like it drains me, like we don't talk so much. (Constanza, initial interview, Vite school)

Would you say that mobile phones are important for interacting with others?

M1: yes

M2: it depends... [not very convinced, slow], because it helps when there is distance...

NNm: yes

M2: ...but when, in this case, for example, I don't like that everyone is on their phones because it is like "hello" [puts a face that indicates that you don't receive a response]

Ev: haha

(Group interview, mixed, Alte school)

Apart from positionings related of being a friend/peer and a student in school, some cases brought up the positionings of being a daughter/son. Antonia, Vicho, and Simona report using their phones to keep in touch with their mums, although Simona's relationship with her mum has the largest impact on her phone use in school. Using her phone in school to contact her mum is at odds with her desire to be a good student, which includes not being told off and not having her phone confiscated. She sorts out this dilemma by using other people's phones or using her phone in the toilet. Simona's case also shows that positionings are dynamic and can change, given that her transition from one group of friends to another was partly reflected by her phone use with friends.

In each of the five cases, there are different ways of using phones and deciding how to use them based on the way the participants relate to others offline and online and the way they understand those relations (positional identities) and the importance given to them. Certainly, phone use does not provide an exhaustive image of every aspect of the five students in school, but since mobile phones are embedded in their school lives, it provides a window into aspects of it. At the same time, the chapter showed that, in their phone use and their negotiations related to it, the five students are orchestrating their multiple positionings as students, friends and daughters/sons in singular ways.

7.4. Chapter summary

This chapter addressed the third research question: How are teenagers orchestrating different positionalities in their use of mobile phones in school? In doing so, the chapter drew on five individual cases of students from both schools mainly generated with data coming from students' interviews and narrative composites of observational data (Appendix L). The aim was not to compare the cases, but to identify and explore across them the positionalities that they are considering in their phone use in school. In doing so, special attention was paid to *positional identities* associated to the five students' phone use in school, i.e. the relational aspect of how they see themselves in school and in their use of phone as students and teenagers.

The individual cases revealed a variety of ways of being and using phones in school. These ways of being refer to how students and others see themselves in that use, as well as being grounded in the positionings students assign to themselves and others. These positionings have to do with degrees of engagement in school, the image projected and perceived by teachers and classmates, and rapport with teachers and students in school as well as with friends and family members outside school. For example, cases such as Rosa-Maria's showed how she uses her trust with teachers and her position as a good student in the class (well-behaved and good grades) to use her phone almost any time and in any way she likes. Another example can be found in Vicho, who does not have good grades and is not particularly interested in school; however, he found a hidden and non-confrontational way of using his phone in classes, and he applies it extensively during breaks with his friends, despite being unable to access the Internet on his phone.

Each student in this chapter is considering their own situation, which is contextual and shaped by their relationships with others in school and beyond. These relationships include online communication with peers and family members, especially mothers. In the case of Simona, she is using her mobile phone mainly to communicate with her mum for coordination and emotional support. Because she is also worried about being told off in classes and losing her phone, she basically does not use it, except surreptitiously in the schools' toilets or uses somebody else's phone.

To sum up, this chapter showed that students are orchestrating different positionings informed by their own desires and other people's desires in their relationship with peers, teachers, and family members. In doing so, they are considering their understanding of themselves as students, young people, and daughters/sons. Moreover, the finding shows that the five students in this chapter, despite not always being engaged in school activities in the way teachers would expect, are responding to their positioning as students which is addressed to use their phones and define strategies to keep using them.

Chapter 8: Discussion

The findings chapters presented three levels of teenagers' negotiation of their phone use, each of them answering a research question: hindering and facilitating factors of teenagers' phone use in school (chapter 5), teenagers' negotiation of their phone use in the classroom with teachers (chapter 6), and teenagers' individual negotiation of their phone use (chapter 7). In the present chapter, I discuss the findings in an interconnected way. This will provide a general picture of the study sites, the digital everyday lives of participants, and teenagers' negotiation of their phone use as part of their involvement in diverse cultural worlds.

The chapter is divided into 3 sections. The first discusses the findings related to the phone use as a negotiation in practice between students and the school's practitioners. This section provides, therefore, an overview of the topic in the schools examined and participants' digital lives there. The second section delves into one of the key findings of the study: that students' phone use and its negotiation are answers to different positionings in the cultural worlds of school, family, and peers. The third section focuses on the intersecting space of cultural worlds –the space of authoring for Holland et al. (1998)- to discuss three relational aspects this study suggests are changing in the world of school and students' school experience around phone use.

8.1 Teenagers' daily digital lives and negotiation in practice in school settings

Participants in this study were using their phones intensively in their schools for diverse purposes: friendship, family life, leisure, and schoolwork (section 6.3.). In this regard, school becomes a space for their everyday digital lives (Selwyn et al., 2017, Merchant, 2012) in a big proportion through their phone use, which participants see as essential and a continuum in their daily life in and out of school (section 6.1.). This overview of their phone use in school took place in both schools despite the different phone regulations in force during the study –Vite school still deciding what to do and Alte school allowing Year 9 and older students to use them during breaks only. In this regard, the official rules were not showing what was taking place in either school, and it is possible to identify a process of negotiation that was improvised and boundaries that, although dynamic, were set in practice by students and schools.

Participants' phone use is part of their everyday digital lives in school and what has been called a Mobile Youth Culture (Van Abeelee, 2016; Castells et al., 2007). They are teenagers using their mobile phones on a daily basis, where texting is a key way of communicating (Lenhart, Duggan et al., 2015).

Moreover, it is possible to identify reciprocal expectations (Mascheroni & Vincent, 2016) in their phone use. This relates, firstly, to participants' reluctance to stop using their phones as a "just in case" and an "always" (section 6.1.), and, secondly, in their continuous phone use with parents and peers outside school. The latter includes communication with peers who have not come to class or who attend other schools (section 6.3.3.). An example of this is Mario (section 7.2.1.), who keeps in touch with his friends in other schools and in another class group, and Antonia (section 7.2.2.), who communicates continually with friends outside school and abroad. Regarding communication with parents, phones are mainly used for coordination, as in the case of Simona (section 7.2.5.), and for emergencies, such the water cut in Alte school (section 6.3.4.).

Participants are not only texting but interacting face-to-face with their phones, mainly with peers (section 6.3.3.). As shown in other studies (Kupiainen, 2011; Taylor & Harper, 2003), participants are sharing multimedia resources that help them start and keep the conversation going and also sharing their phones if necessary, among friends. For example, Rosa-Maria (section 7.2.4.) uses her phone to get access to information to create her novel and talk about books, video games, and specialised topics. In the case of Vicho (section 7.2.3.), he and his friends use their mobile phones to listen to music so they can disconnect from classes and play games during breaks, while sharing their phones and Internet access if needed.

Finally, participants' everyday digital lives in schools also includes practices related to schoolwork. They can be understood as everyday practices as most of them are not promoted by the school (Kupiainen, 2011). These include looking up information, taking pictures, and using dictionaries and calculators (cf. Olofsson et al., 2017; O'Bannon & Thomas, 2014). These practices are part of a continuum of how participants revise in breaks (for example, Rosa-Maria) or at home (section 6.3.1.). However, because they have found a space in school, in the interactions between students and teachers, I would claim that these practices play a role in transforming the experience participants have as students in school. This will be discussed in more detail in section 8.3.3., along with other implications of participants' phone use in school.

An important characteristic of the participants' everyday phone use in both schools is that, overall, it is not a hidden practice. It is visible; teachers and school authorities know about it, often turning a blind eye (sections 5.4. & 6.1.); and to some degree, even understanding their importance in their daily lives (section 5.1.). Examples of this visibility and everyday nature can also be found in interactions between students and teachers supported by students' phones, including teachers asking students to show them photos or memes on their phones (section 6.2.3.). This idea of visibility adds nuances to views of the technology use as helping teenagers find spaces away from adults' sight (e.g.

Davis et al., 2017; Van Abeelee, 2016), or notions of the creation of a digital underlife (Bulfin, 2008) or an autonomous space for everyday life (Kupiainen, 2011). It would be possible to counter that schools, for example, do not have a personal space such as a bedroom for students (cf. Mascheroni & Ólafsson, 2014), or that online interactions could have become invisible to the adult eye. However, in this study, among everyday phone use, hidden practices become one among many strategies for participants to manage their phone use depending on contextual and individual situations (more in section 8.2.) and not a general feature. This emphasises the idea of school as a space for engaging with others, peers and adults, in which relationships are mediated by phone in an important manner. Highlighting this visible and mundane aspect of everyday phone use is highlighting at the same time the interconnection and overlap of it with school practice.

This visibility and interconnection of phone use is largely possible because it is not totally forbidden. Official regulations do not provide the background of interpretation of action (Holland et al., 1998) to understand what is taking place, but a “negotiation in practice: improvisation in students and teachers’ interactions, in which different elements are considered as facilitating and hindering factors (chapter 5). This negotiation includes teachers and authorities considering diverse elements of students’ accountability, educational use, students’ safety, youth culture, parents’ involvement, and students’ daily actions. In general, it is possible to say that the most forbidden (and hidden) practices are those related to phone misuse, such as cheating in tests (section 5.3.1.) or taking pictures of classmates’ answers (section 6.3.1.), working around rules (section 5.3.1.), and online misuse (section 5.3.2.). When students are caught, the problem is solved on an institutional level inasmuch as it involves a whole class group (e.g. Juampa Juampito) or has an impact on school finances (e.g. electricity cut for students use) or becomes a school-level interest (e.g. unit on responsible use of social media). However, it is daily and visible phone use that is mostly negotiated on the go and mainly in the classroom. Teachers believe in the importance of phones in their students’ daily lives, as well as the importance of them being in contact with technologies in school. Institutional regulations, as in the case of Alte school, make it possible to define steps in the way phones are confiscated and then retrieved, but teachers in both schools believe that some grey areas remain (e.g. being responsible for personal devices or deciding what to do when something happens outside school hours between students online) (section 5.4.). Moreover, in both schools, teachers report a lack of institutional support when parents get involved (section 5.4.). On the flip side, students are reading the classroom context and sharing teachers’ perspective on the prioritisation of certain moments of the class (section 6.2.2.), while being aware of their teachers’ various approaches to dealing with phones and the increased leverage they enjoy as they grow up (section 6.2.3.).

This study has revealed that the space for using phones is orchestrated not only by students, but also by teachers, school authorities, and parents in their decisions on how to deal with it in the school. Previous studies have shown different interests in deciding what to do with phone use in school, such as eradicate misuse (Thomas & Muñoz, 2016), attend parents' and student's needs for communication (Vandoninck et al., 2018), and give a curricular use to phones in classes (Black-Fuller et al., 2016). However, from a relational perspective, this study has shown the different interests of diverse actors in practice and intersecting within the school and classroom. The findings presented add nuance to the idea of school as a regulated space for technology use given that personal device use is incorporating other actors, such as students and parents, to the process of generating in-practice rules (cf. Selwyn & Bulfin, 2016). In this regard, it is possible to argue that cultural worlds of school, peers and family life are intersecting in the use of phones in school. In that intersection, actors are positioned relatively differently and the worlds' boundaries overlap and redefine. The following section addresses the student's engagement in this interconnected space while using and negotiating their phones, which was the focus of this study. The subsequent section discusses some key boundary and positionalities redefinitions for parents, teachers and students (section. 8.3.).

8.2. Cultural worlds and positional identities in participants' mobile phone use

The present study shows that participants are responding to contextual factors, as shown in the previous section. The theoretical framework used in this study (Holland et al., 1998; Leander et al., 2010) allowed us to see that response as part of a process of participation in intersecting cultural worlds of schooling and everyday life. Participation in a world entails engaging with it, which turns into orientation towards action or "sense-as-actor" (Lachicotte, 2009). And that action is, as explained in the theoretical chapter (Chapter 3), at the same time the process of making sense of the worlds in which actors participate (Holland et al., 1998). Participants in this study are not indifferent, but quite keen, to engage with their peers offline and online, to be in touch with their families and count on them if necessary, as well as to engage in school (at least in general terms). In their phone use in school, I would claim that participants understand and orient their action towards their positionings in those worlds as peers/friends, students, and sons/daughters. That self-understanding and orientation towards action are the positional identities of participants, which lead them to use their phone and define strategies in diverse and interconnected ways. In other words, participants' phone use is informed by how they see themselves and who they want to be in their relationships with adults and peers. Therefore, phone use is not just a simple reaction to contextual opportunities or just a desire for fun or entertainment.

This section discusses the negotiation of phone use drawing on the theoretical literature and findings mainly coming from chapter 7 on individual phone negotiation. This review makes it possible to understand how students manage to use their phone in school in relation, and not in opposition, to the facilitating and hindering factors produced by schools and teachers, as well as by parents and peers.

8.2.1. Participating in cultural worlds of school, peers and family life through phone use

It could be said that school, peers/friends, and family life emerge as the cultural worlds forming the background to interpretation and action (Holland et al., 1998) in participants' phone use in both schools. They can be identified, firstly, from their daily engagement with phones, already presented in the previous section, in terms of the interactions and purposes given to them. Secondly, they are identified in this study through their capacity to organise and guide participants' phone use and associated strategies (section 6.3.). In other words, it is not just that phone-users are the main characters in their relationship with others in each cultural world; instead, their "acting", as in an improvised play (Lachicotte, 2009; section 3.2.3), is guided by and (re)producing the loose script of each of them. It is possible to identify the cultural worlds' interconnected boundaries through how participants are considering to use their phones and in the strategies that they are developing.

The school world becomes visible in participants' phone use given the overarching notion that phones, ideally, should not to be used in school. In the school world, a "good student", for teachers and school authorities, is one who does not use her mobile phone in any way that jeopardises peers' safety (section 5.3.3.) and school practice (sections 5.3.1 & 5.3.2..). The desired student positioning is one who self-regulates herself (section 5.4.), a view which also permeates students' beliefs (section 6.2.). Thus, it is promoted in units on responsible use, or when students are told off because of phone misuse or when phones are confiscated. These desired and promoted identities can be related to the idea of schooling as a carrier of an enlightenment project (Link et al., 2017), which is aimed at the development of autonomous and rational subjects. Participants from both schools (section 6.2.) mention that they feel that they can see when mobile phone use could be disrespectful (e.g. when a teacher is explaining something). Moreover, they negotiate directly with teachers when they know their phone use can aid the class (section 6.3.1.) or when it allows them to be more focused and less disruptive, like when they listen to music (section 6.3.2.; Vicho's case, section 7.2.3.). Thus, participants know that resorting to the notions of "well-behaved" and "academically-engaged" students help them negotiate with teachers.

However, although the school world serves as a background for phone use in school, it is possible to say that phone use and the device itself have not been totally subsumed into (cf. Philip & Garcia, 2015; Ott et al., 2014), working as a boundary object (Akkerman & Bakker, 2011). The negotiation in practice discussed earlier (section 8.1.) shows that it is also part of the cultural worlds of peers and family life. The intersection is continuous (Leander et al., 2010). For example, Antonia is texting some friends and Agustina is communicating with a classmate who did not come to school, while both are engaging with their friends in a class activity (section 6.3.3.). Or students calling their parents because of an emergency (section 6.3.4.), while the teacher and school authorities are trying to control the situation. Moreover, the notion of phone use as inevitable in teachers and students (sections 5.1. & 6.1.) also shed light on the cultural worlds of peers and family. Among school professionals, particularly teachers, there is awareness of those distinctions between the importance of phone use for relationships with peers and family. For example, teachers in both schools understand that for some students, phones are the only way to communicate with their parents during the day (section 6.3.4.). Students suggest that it is impossible for them not to use their phone for certain practices with peers (e.g. engaging in peer communication, listening to music as a group, sharing face-to-face hobbies and interests, exchanging information with peers who are absent), and with their families, especially parents (e.g. communication with them in case of emergency and coordination of transport). Reciprocal expectations (Ling, 2012; Mauss; 1990) are operating in online and offline interactions with peers and relatives (Corsaro, 2005; Taylor & Harper, 2003). Rosa-Maria (section 7.2.4.) and Antonia (section 7.2.2.), for example, strongly prioritise face-to-face and online peer relationships, respectively; and Simona (section 7.2.5.) prioritises her bond with her mum, and her role as older sister. Students, in other words, are responding to and participating in those worlds. These examples suggest that there are individual ways of deciding what to do their phones, while considering certain relationships as important for them. For example, regarding the water cut in Alte school (section 6.4.4.), each student reacted differently. Some stayed in the classroom, respecting the teacher's instructions, while others just took their things and left. The following section delves into the individual level to understand what students are considering in the overlap of school practices with peer and family relationships, and therefore in how to negotiate their phone use in school.

8.2.2. Crafting strategies and prioritising in the use of phones

Individual ways of using phones are associated to the way participants see themselves and how others see and address them. For example, Rosa-Maria sees herself as a fan girl, a self-understanding that is shared by friends and school and reflected in her varied hobbies and talents (section 7.2.4.); Antonia describes herself and is aware that she is known as an intensive phone user (section 7.2.2.); Mario is known for playing pranks, for example sending photos and memes, and his friends tease him back (section 7.2.1.). These ways of being result in positional identities as the product of interactions with others (Holland et al., 1998), in this case, in the world of peers. To understand how participants manage to use their phones in such a constraining space as school, specifically the classroom, positional identities in the school world and family life world are also important.

Using and negotiating phone use in school it is not just the result of successfully pressuring teachers or simply disengaging from the school world. On the contrary, participants are drawing on their positional identities within the school world to orient their decisions of how to use their phones in school and classes, and which strategies to employ. Concretely, in terms of strategies, the direct participants found ways that may come across as contradictory positioning within schools –in terms of engagement and relationship with teachers or peers– but which make sense when considered together. Therefore, students' understanding of who they are and what their position in the school and classroom is, lead them to use their mobile phones in certain ways. Rosa-Maria (section 7.2.4.), for example, can use it for educational purposes during breaks and classes, and even if she is not doing so, the expectation from teachers and peers is that she will be using it for something beneficial. She is fully aware that being a good student and behaving well in classes allows her to do more things than most of their classmates (cf. Tulane et al., 2017). Her actions are based on her knowledge of what her school expects students to be; also, she is aware of how useful other identities are for using mobile phones in school.

Students are crafting strategies in the orchestration (Holland et al., 1998) of desires and expectations from each cultural world, i.e. their boundaries and their positionings in them. This includes not only the worlds of peers and school, but also the family life world. A good example is Simona (section 7.2.5.). She portrays herself as a good student who is interested in behaving well, having good grades, and avoiding being told off by teachers. She also has a close relationship with her mum and uses her mobile phone to keep in touch with her at school for support, but also to coordinate transport for her and her little brother. She is also moving from one group of friends to another and feeling more comfortable in showing her interests, such as playing video games with others. Considering those positional identities in the worlds of school, family life, and peers, she has opted to use her phone as

little as possible to avoid confiscation, while crafting some strategies to keep in touch with her mum and playing games. She has also chosen to use other people's phones openly and her own in the toilet. In other words, she is crafting strategies in accordance to her positional identities as student, peer, and daughter.

But other students, such as Vicho and Antonia, do not act in accordance with the image of being a good student in terms of grades and/or good behaviour. Vicho, for example, is a student who sees himself as "not a good student" basically because of his low grades and low engagement in school activities (section 7.2.3.). Antonia, despite being interested in the educational system, is not particularly engaged with the daily teaching practices taking place in school. Both students do not use the tactic of asking for permission, unlike Rosa-Maria. Vicho chooses to be as invisible as possible, and this not only applies to his phone use but to his overall behaviour in classes, where he and his friends are very quiet. They look like they are paying attention, but on most occasions, they are listening to music and not paying attention to what is taking place. In the case of Antonia, her phone use is very intense in classes. Probably, she is the student who is most frequently reprimanded by teachers about her digital practices in both study sites. Teachers and peers have a problem with her being so engrossed in her mobile phone. Therefore, her tactic is to avoid confrontation with both groups (section 7.2.2.). She does not get upset when caught or even when teachers confiscate her mobile phone. She complains sometimes, but she is aware that her phone use is not optimal and that it could also be the reason why her grades are dropping.

Previous research on children and teenagers' digital practices in the intersecting cultural worlds of schooling and everyday life (cf. Jocius, 2017; Bjørgen & Erstad, 2015) has shown that students are aware of these distinctions between cultural worlds, including which positionings are prioritised in school (Jocius, 2017), when shaping their possibilities of action. This study extends this evidence and shows how, in that intersection of practices, teenagers manage to find strategies to keep using their phones and avoid confiscation or being told off. Students are not only interpreting their practices and themselves, but also orchestrating those relationships, contextual cues, and self-understanding –as cultural resources– to act in the multi-layered context of school (Holland et al., 1998; Leander et al., 2010).

In these ways of being and acting, direct participants are prioritising certain positionings and cultural worlds over others (cf. Ito & Okabe, 2005 in the public space). For example, Antonia (section 7.2.2.) overall prioritises her online communication with peers while in school. Or Mario (section 7.2.1.), who prioritises his image as a good student, so he is capable of putting somebody else in the spotlight if necessary, to avoid being caught in classes. This prioritisation is not permanent or stable; it can change

depending on moments or situations. This is Vicho's approach (section 7.2.3.), who listens to music in class, but does other things while on breaks; or Simona (section), who will wait for moments when the teacher is not delivering content to use her phone. This shows a different perspective on how individuals act in cultural worlds, not just considering which identities are more expected than others (Jocius, 2017)—or, as some authors say, in which cultural worlds they have a different status, for example “good” or “bad student” (Luttrell & Parker, 2001). In this study, the phone user is prioritising a specific way of positioning in the school (e.g. good student, disengaged student, well-behaved student) and dynamically balancing positionings in cultural worlds of everyday life (e.g. responsible daughter; present friend; untruthful friend). This prioritisation does not necessarily come without burden or tensions. For example, Antonia has problems with her teachers and peers for not being present while communicating online, while Simona seems to struggle to avoid phone confiscation while keeping in contact with her mum (cf. Mascheroni & Vincent, 2016; Barron, 2014; Ito & Okabe, 2005 in other contexts).

I would claim that this prioritisation is mediated (Vygotsky, 1978) by participants' feelings, mood, and thoughts. This emotional aspect emerged as something important in participants' interviews (section 6.2.1.). Feeling bored, frustrated, looking for excitement, or seeking concentration to study were some of the things they mentioned that partly explain why they are using their phone in school in the first place. A good example is the case of Mario (section 7.2.1.), who seems motivated to use his phone due to the excitement he derives from not being caught and getting his way. From a theoretical perspective, these feelings and thoughts are part of people's identities as higher mental functions (Holland & Lachicotte, 2007). These aspects are key elements that guide participants' actions and remind us of the individuals who are at the centre of the school context orchestrating cultural resources.

This section has shown that participants' phone use cannot be seen as opposition to school, but in fact in relation to and as a response to it. How students use their phones constitutes an acknowledgement of and a response (Bakhtin, 1981) to how they see themselves in school and how they are seen there. Moreover, the strategies students use result from an orchestration and prioritisation of positionings as students, peers, and daughter/sons. In this regard, this study aligns with studies on unofficial practices in school as non-oppositional (e.g. Livingstone & Sefton-Green, 2016; Selwyn & Bulfin, 2016), and that they are result of cross-boundary experiences across school and everyday life (e.g. Bjørgen & Erstad, 2015; Crook, 2008). However, this study enables a more complex analysis. Firstly, it shows that different levels of engagement of participants within the school world and the prioritisation of positionalities become in some ways a “must”. Phone use serves participants to connect or disconnect from adults and peers when needed (cf. Livingstone & Sefton-Green, 2016), but works as a

circumstantial tool given that being in school always entails a certain positioning, even though it could be of disengagement (e.g. Vicho). Secondly, this study highlights the notion of family life as being (re)produced in school in their phone use. “Everyday” it is not just about playfulness, peers, and self-interest in that space (cf. Bulfin & Koutsogiannis, 2012; Tobin & Henward, 2011). The connection of family life with schools and students is not something new (e.g. Livingstone & Sefton-Green, 2016; Nespor, 1997). However, from the perspective of digital lives in schools, I think it is possible to claim that personal devices, such as mobile phones, have incorporated this family aspect that school-provided devices had not, and that participants are considering, responding to, and participating in it.

8.3. Relational forms: redefining worlds’ boundaries and authoring the school world

The negotiation of participants’ phone use is taking place in an intersection of cultural worlds, and involves adults and young people’s interactions in online and offline realms. It has already been discussed that in that intersection, phone users are responding to diverse positionalities and finding various strategies to negotiate their phone use with teachers and schools. However, it is also possible to identify in that process three relational forms that appear to be undergoing a transformation in the school world in relation to phone use: the relationship between families and schools; the relationship between teachers and students; and the experience of students themselves in school. By calling them relational forms, I want to emphasise the cross-boundary involved in these aspects’ changes (Leander et al., 2010). The relational aspect also comes from the notion of authoring (Lachicotte, 2009; Holland et al., 1998; section 3.2.3.), the inevitable process that occurs in the (re)production of ways of being and acting in the social world of those participating in the intersecting worlds of school, peers and family life.

These three relational aspects are showing some of the implications of participants’ phone use in the school worlds. Phone use, in this regard, is seen as a shaper of relations and positionings within the school, and not as an independent cause or the only cause. Thus, this reinforces the idea of phone use as embedded in the daily lives of participants (cf. Ling, 2012) and the view of their phone use as part of their everyday life in school (cf. Bjørngen & Erstad, 2015; Kupiainen, 2011).

8.3.1. Families and schools – reconfiguring positionalities

Some authors have talked about a reconfiguration of positionalities inside the classroom because of students' mobile phone use (Haddon & Vincent, 2014; García, 2012; Sánchez-Martínez & Otero, 2009). This has been linked to a redefinition of the relationships between teachers and students, mediated by the relation between students and families (cf. Haddon & Vincent, 2014). Findings in this study suggest changes involving these actors, although related not only to the classroom (student-teacher relationship) (section 8.3.2.) but also to a broader redefinition of positionalities between families and schools.

Firstly, parents in this study are getting involved in mobile phone use decisions. For example, Alte and Vite school authorities, in their definition of phone regulations, consider and are planning to consider, respectively, the opinions of parents (section 5.1.). Some parents are pressuring schools for their children to have their phones with them in case of emergency. Moreover, when a type of phone use becomes public, parents also get involved, demanding that the school solve the issue (cf. Miyaki, 2005). For example, this was the case with Juampa Juampito (section 5.3.1.) in Alte school, where an anonymous member of the class disclosed cheating techniques of his/her classmates to the teachers' community. In this situation, parents sorted things out, apparently with the school authorities and without student involvement.

Secondly, parents also become an "absent other" (Williams & Williams, 2005; p.321) on a daily basis through texting with their children during school and lesson hours. Participants, as already discussed, actively engage with their parents on daily communication. Some students report that sometimes their parents can put too much pressure on them to keep the flow of communication going (section 6.4.4.). However, it is something mutual as students also pressure back when they need their parents to pick them up earlier from school or when something unexpected happens, such as the water cut in Alte school (section 6.4.4.).

Both aspects of parents' involvement around phone use in the schools studied have implications for how parents position themselves in relation to teachers and students. Haddon and Vincent (2014) talk about a rebalance of power between teachers and students' families, which is visible in both schools. It is common for participants to use the "family card" to avoid being told off or prevent the confiscation of their mobile phones. Students know that, by letting teachers know about their communication with their parents (real or not), they are highly likely to receive authorization to use their phones in the end (section 6.4.4.). To some extent, students continue being answerable to their parents over teachers. Here, the water supply cut constitutes a good example (section 6.4.4.). In that situation, the school staff did not have much to say. Before the school had a plan on how to proceed, students already

knew if they would have to stay at school or be picked up by somebody. Several students were even picked up by just one adult. The staff basically ended up just having the role of facilitators. Teachers are aware of this rebalance of power when they report a lack of institutional support when they confiscate students' phones, claiming that school authorities sometimes take the side of students' families (section 5.4.).

The rebalance of power between teachers and students' families can be explained considering how the relationship between students and their parents has changed. Firstly, parents play a key role in students' access to and use of mobile phones (Haddon & Vincent, 2004; Barron, 2014; Ureta et al., 2011). They are generally the ones who buy them their first mobile phones, and therefore have a say in this regard. Moreover, the acquisition of children's and teenagers' phones in the first place has been linked to a societal change in how parenting is becoming more controlling and parents are feeling more anxious regarding a time that they perceive as more uncertain and dangerous (Barron, 2014; Nelson, 2010).

Another explanation of the relationship between parents and schools regarding the participants' phone use can be found in the way the Chilean Educational System involves parents in educational decisions. At the time of the study (2015), and since 1993 (Vial, 1998), in state-subsided private schools (Appendix B), like the two institutions studied, parents made a co-payment for their children's education. This could make them feel entitled to participate in their children's life. In fact, we could trace this situation back to the school-choice policy that underlies the Chilean school system. The voucher system that exists in Chile is based on the rights of families and parents to choose the best education for their children (Canales, Bellei & Orellana, 2016; Hernández & Raczynski, 2015), drawing on a neoliberal-based system of school competency (Cavieres, 2011). This put parents in the position of consumers (Cornejo et al., 2015; Elacqua & Fabrega, 2004), enabling them to feel entitled to demand what they think is important for their children.

Thus, is possible to claim that some social and cultural changes in the relationship between students and their parents are entering the school setting and producing a rebalance of the positioning of families and schools. As previously noted, this also influences the relationship between teachers and students in the classroom. The following section will delve into this while adding some other elements.

8.3.2. Students and teachers – redefining boundaries

As previously noted (sections 5.4. & 6.1.), the classroom has become the space par excellence for the participants to negotiate their phone use in school with their teachers. However, this is not a straightforward confrontation. Teachers do not act upon the use of mobile phones in coherent fashion. Students take advantage of this and are able to orchestrate in-between moments (Livingstone & Sefton-Green, 2016) provided by each teacher and her educational practices in the classroom to use their phones (section 6.2.2.). Thus, it is possible to say that students do not see a clear opposition or reprimand coming since, in most cases, teachers turn a blind eye or change strategies depending on the situation.

From the teachers' perspective, they are worried about confiscating their students' phones because they are seen as personal objects. Even in the school where teachers feel more supported and the regulation is clearer (Alte school), they choose to avoid confiscating the students' mobile phones beyond the lesson hour (section 5.4.) and turn a blind eye if their phone use is not disruptive (cf. Peck et al., 2015). In their view, they are prioritising their own practice (being able to deliver the set content and doing the planned work) and preserving a good relationship with students (avoiding confrontation and preventing student distress) (cf. Haddon & Vincent, 2014). This is mainly because they do not want to take responsibility for the safekeeping of students' phones. As other studies in Chile (Halpern, Piña, & Vásquez, 2016) and Belgium (Vandoninck et al., 2018), the participating teachers have constrained alternatives to counteract phone use, given the lack of clearer accountability in the enforcement of phone rules in their schools (section 5.4.). Their choice to weakly resist their students' phone use may be due to not wanting to take on more responsibilities in an educational system characterised by high demands on teachers in terms of workload and students' outcomes (Cornejo, 2012), a situation that has also been observed in countries such as the UK (Tapper, 2018).

While setting a professional limit, paradoxically, the participating teachers are also allowing a certain level of phone use that includes blurring boundaries between them and their students. As previously pointed out, they do this for the sake of their professional practice, but also because they are part of the cultural worlds of everyday life. During lessons, it was common to see teachers pull out their mobile phones and use them. Like young people, teachers seem to think that the best time to use their phones is when students are doing a certain activity (generally filling in a worksheet or copying from the whiteboard) (section 6.2.3.). It could be argued that teachers' use of their own phones serves two purposes. Firstly, even though students do not complain or directly use this as an excuse, teachers' phone use operates as an implicit excuse (section 6.2.3.). Secondly, it also functions as a cross-boundary practice by teachers towards their students' peer world. Participating students do not find

it problematic that teachers use their own phones in class. In fact, students interact using their phones with teachers and teachers can ask them to check things on their phones (section 6.2.3.). These actions may be diluting teachers' authority and positionality inside the classroom, turning teachers less into an authoritative figure and revealing a friendlier side. Some studies have shown the importance of trust as a mediator of teachers' phone rule enforcement or students' phone use in classes (e.g. Davis et al., 2017; Garcia, 2012; Charles, 2012). In this study, trust has a limited presence. Participants are able to identify which teachers are more permissive (section 6.2.2.), who, in my view, are the ones who interact more with them around their phone use. In this study it is possible to connect, in a broad sense, a good relationship with teachers and students being able to use their phones, but not in terms of trust as a "cooperative interaction" (Gregory & Ripski, 2008; p.338). What leads me to question the idea of trust among participants and their teachers is the notion of self-regulation as the desired identity for students reported by teachers and students themselves (sections 5.4. & 6.2.). This connects with teachers prioritising their job, and students, although considering the context, finally prioritising their interests as students, peers, and family members (section 8.2.2.). What seems to be awarding more freedom to phone use is trust, but first mediated by the image of a good student, someone disciplined, who gets good grades, and is well-behaved. For example, the case of Rosa-Maria (section 7.2.4.), who has more leverage to use her phone because she is a good student, or even Mario (section 7.2.1.), who can pin his blame on somebody else and teachers seem to believe it. If more individualistic or "schooled" motivations predominate, it could be because of the already mentioned lack of institutional support for teachers, as well as the Chilean neoliberal educational system that has promoted a test-oriented, and individualistic education (Cavieres, 2011), all of which is related to the redefinition of the positioning of teachers, students, and their families.

8.3.3. Educational practices and student experience - making school life more porous

A final implication of phone use as an intersection point of cultural worlds is that participants are crafting a particular way of being students, in the sense of how they are experiencing studying, revising, and being in classes. Although situated in the school, I would claim that this is related to the cross-boundary experiences participants have in their daily life in different settings (cf. Jocius, 2017; Gronn et al., 2014; Bulfin & Koutsogiannis, 2012). In this regard, through their phone use, participants are bringing together diverse practices from their relationships with peers, family, and out-of-school revision in a way that creates a distinctive experience of being a student.

Firstly, it is possible to distinguish some educational phone use in both schools. Although it has found some acceptance from teachers, it is mainly due to students' initiative or "inventive pressure" (section

6.3.1.). This goes in line with evidence available from other countries, which indicates that students use phones' calculator, web search, or dictionary functions (Olofsson et al., 2017; O'Bannon & Thomas, 2014) and download pictures for arts projects (Kupiainen, 2011). These practices, as in this study, found teachers' approval. In this study, moreover, some contested practices appeared, such as taking pictures of textbooks, worksheets, or the whiteboard and carrying pdf or ppt files for presentations or schoolwork (section 6.3.1.). Students have been negotiating these practices in both classes directly with teachers or getting their way out of teachers' sight. Both contested and non-contested educational practices resemble the way participants study or do homework at home or in other spaces individually or with peers (section 6.3.1.). Using pictures, audio, phone dictionaries or calculators, and sending varied files to classmates are part of what students also do outside school as well.

In this educational experience that phone use makes possible, I would add another practice that alters the experience of being in classes, namely listening to music. This use was mentioned as a key aspect in the participants' daily lives in and out of school (section 6.3.2.). As in the case of Vicho (section 7.2.3.), listening to music helps students not only to disconnect from classes, but also to feel more relaxed or even focused when doing exercises individually or in groups (section 6.3.2.) (cf. Tessier, 2013, in Ott et al., 2018). In other words, this practice has found an educational use in relation to students' mood or feelings, or even for teachers, who perceive them as less disruptive when they listen to music (section 6.3.2.). Finding this sweet spot between leisure and schoolwork has been described in the literature as making school more liveable and less tedious (Selwyn & Bulfin, 2016; Bulfin, 2008; Hope 2007). However, I would argue that the above-mentioned educational practices are also making the school space and specifically schoolwork friendlier and more familiar for participants.

Furthermore, there are two other practices that are shaping this more friendly and cross-boundary experience: communication with peers and parents. Beyond the fact that both can overlap with schoolwork (e.g. Agustina and her friends texting and calling a friend who did not attend school that day, section 6.3.3.) and be fun or relaxing, both are related to the creation of a support and safety bond for participants. Some students are getting in touch with friends from other class groups or from out of school and sharing experiences about teachers, school life, and subjects (cf. Eisenhart & Allaman, 2018), as is the case of Antonia and Rosa-Maria (sections 7.2.2. & 7.2.4., respectively). In the case of communication with parents, as mentioned earlier (section 6.3.4.), that bond has support and coordination functions, while also serving students to ask to be picked up earlier due to workload-related stress or feeling overwhelmed. More than multitasking, students wish to have their phone at hand, as Rosa-Maria said, "just in case" (section 6.1.). That "just in case" ultimately refers not only to

practical aspects, but also to teenagers in school who may need a source of support or entertainment, or even a way out of school.

This creation of an amicable space could be related to changes in youth wellbeing in schools in different part of the globe, such as high workload anxiety levels (cf. OECD, 2017b). Elements playing a role in this were present in both schools examined. For example, in Alte school, my contact person was worried about giving me access to the school because their students already had a heavy workload (section 4.3.2.2.), and as mentioned students feeling overwhelmed because of the workload they have in Alte school (section 6.3.4.). Additionally, both schools have a subject in which they take mock University selection tests (Appendix N), and in my time there, tests, graded activities, presentations, and mock exams for national tests were an important part of school life.

This section has shown that the phone is supporting a new cross-boundary experience for students, which while located in schools, ultimately relates to a continuity in ways of studying and creating bonds. In a school space that is changing positionalities and relationships between teachers, school authorities, and families, as shown in this section, students are authoring a particular way of experiencing being at school.

8.4 Chapter summary

This chapter presented the discussion of findings in chapter 5, 6, and 7, in which each research question was answered. Here, the findings were discussed in relation to the literature review (chapter 2) and theoretical framework (chapter 3) in an interconnected way, suggesting some implications of teenagers' phone use in the school setting for the family-school and the teachers-students relationship, as well as for students' experiences.

Participants are bringing and performing digital practices, which form part of their everyday lives in relation to friendship, schoolwork, leisure and family life. That general image supports the evidence of students' phone use as multipurpose (e.g. Tulane et al., 2017; Garcia, 2012) and unofficial everyday (digital) practices in school bringing everyday aspects to school practice (e.g. Hope, 2007). However, the findings presented in this study suggest that those diverse uses and practices are organised into cultural worlds of school, peers and family life, in which actors are participating around students' phone use. In that intersection of worlds, a negotiation in practice is taking place in which phone use finds a space. Diverse interests, coming from school authorities, teachers, parents, and students are at stake and pulling in diverse directions, with schools trying to keep phone use under control, teachers prioritising the pace of their lessons due to a lack of institutional support, and parents

pressuring for their kids to bring their phone to school, and students using their phone in a variety of ways that are important for them in classes, social relationships, and family life. Thus, in this negotiation, the space for students' phone use is orchestrated not only by students, but also by schools and parents.

Overall, this study has shown that teenagers' phone use has not turned into a hidden, dichotomous, and oppositional practice, but has instead become a daily part of their experiences in school. Moreover, their everyday phone use should not be seen as a single and compact negotiated practice, but as participation in various cultural worlds. Teenagers are considering and prioritising how they see themselves and who they want to be as students, friends, and daughters/sons in deciding how to use their phones in school and in crafting strategies to keep using it there.

A phone use that is visible and interconnected with institutional and teachers' practices has become, overall, a mundane aspect of the participating schools. In this sense, findings of this study suggest that students' phone use is associated in some changes in the interaction between students' families and schools, teachers and students' relationships in the classroom, and teenagers' experiences as students in school. These changes involve the redefinition of positionings between students, families, and students, causing students' parents to acquire a stronger influence over teachers in decisions regarding students' phone use and some administrative issues. Together with that redefinition of positionalities, students, in their phone use, are creating a particular experience of being students, in which they are bringing into school familiar ways to study, access entertainment, and receive emotional support. All of these changes can be attributed not only to their daily and continuous phone use, but also to societal changes around students and parents' relationships and to the Chilean educational system which, at the time of the study (2015), gave families a key role in choosing their children's education and could be defined as academic-oriented, putting extra pressure on teachers and students.

Chapter 9: Conclusions

This study explored how Chilean teenagers use and negotiate their personal mobile phone use in school. Using a sociocultural and practice theory perspective and an ethnographic methodological approach, the different interconnected uses, relations, and positionalities of teenagers' mobile phone use in schools were mapped. Different levels provided different points of view of the negotiation and interconnection of school, classroom, and individual elements.

In this chapter, the main findings of the study are summarised, followed by a section presenting some recommendations regarding students' phone use in schools. The following section discusses the contributions of this study for the intersecting field of youth and digital technologies in terms of findings, methodology, and theory. The final sections present limitations, suggestions for further research, and final remarks on this study.

9.1. Teenagers' mobile phone use in two schools in Chile: a summary of findings

This study shows that teenagers' mobile phone use is an unresolved, contested, and multi-layered phenomenon in two schools in Santiago, Chile. Students are using their phones in school contexts in which diverse, and sometimes contradictory desires, are at stake. In that context of partial opposition, teenagers' phone use has become part of their daily experience in school. The cultural worlds of peers and family life –and ways of being and acting as friends and daughters/sons– are overlapping and connecting with a school world where teenagers are engaging in diverse ways while considering their context to use their phones. In responding to their relationship with teachers, peers, and parents, the participating teenagers found individual ways of using and negotiating their phone use in school. The following subsections detail these findings, referencing each research question and key aspects of the discussion chapter.

9.1.1. Schools are dealing with diverse and interconnected resources and desires around students' mobile phone use

RQ1: What elements in the school world are constraining or enabling teenagers' mobile phone use?

Both study schools are improvising ways of dealing with students' phone use considering diverse and sometimes contradictory cultural resources regarding parents', students', and teachers' desires; discipline; budget; technology integration; control versus development of self-awareness; and responsibility. They work as facilitating and hindering factors of students' phone use. The situation in both schools is similar, despite differences in terms of official phone regulations at the time of the study.

School authorities and teachers control and limit daily phone use in classes, as well as misuse related to working around rules and cheating. These elements have been identified in the literature (e.g, Knorr, 2018; Ko et al., 2015). This study also shows that schools, as in the case of Alte school, sometimes implement measures to educate students about responsible Internet and media use to develop in them a more prudent attitude.

Some facilitators have been identified in this study a well,, such as students exerting pressure to use their phones in general (cf. Halpern, Piña, Vásquez, et al., 2016); authorities and teachers understanding the importance of technologies in their students' lives and for educational purposes (cf. Vandoninck et al., 2018); and parents' and students' desire to keep in contact through mobile phones in case of emergency (cf. Haddon & Vincent, 2014; Garcia, 2012).

However, these resources and desires are interconnected and pull in different directions; therefore, paying attention to or solving one issue can affect another. In this regard, what takes place is a negotiation in practice, where school authorities and teachers are improvising ways to deal with their students' phone use. Moreover, the classroom becomes an emblematic space where teachers are choosing to privilege their lessons' pace and their bond with their students when considering how to deal with phones in their classes. Teachers report a lack of institutional support to enforce rules (cf. Halpern, Piña, & Vásquez, 2016) that also influences their decisions.

These aspects show controlling phone use or fostering the curricular use of phones are just some aspects involved in the decision of what to do with students' phones. Overall, in the combination of agreements in practice, diverse desires, and emerging issues, students have a space to use their phones in school. Not only during breaks, when it is virtually permitted, but in classes as well.

9.1.2. Students are adjusting their phone use and negotiation considering the classroom context and phone purposes

RQ2: *How are teenagers negotiating their use of mobile phones in classes with teachers?*

The *negotiation in practice* around phone use also entails students from both schools navigating a diversity of aspects of their classes, teachers, and themselves. This ends up with students using their phones in ways that sometimes oppose teachers' desires, but which address their own desires and concerns, while also providing some support to classroom activities.

Students are reading the classroom environment considering a variety of cultural resources. These include changes in regulations and the way teachers treat them over time; the different ways teachers approach phone use; their relationships with teachers; and their present situation in the class and in each subject (e.g. grades, mood, feelings). Students are aware that using their phones can lead to distraction and bad grades, and that it can be disruptive for teachers, however, they admit that their phone use is important for them because it provides entertainment and allows them to interact with peers and parents in and out of school. Overall, students know when, how, and with whom they are able to use phones for diverse purposes, which sometimes overlap. These uses include entertainment, schoolwork, interaction with peers, and communication with parents. For example, they combine doing school activities with listening to music and/or contacting friends who did not attend school that day.

Findings show that students' motivation to use their phone and the ways in which they approach teachers to negotiate this use are organised differently depending on the kind of use involved. In this process, students push some boundaries with teachers. For example, listening to music not only serves as entertainment, but also as a way for students to concentrate in classes and feel more at ease. Students are also pushing boundaries with teachers to use their phones as calculators and dictionaries or to take pictures of the whiteboard. Such uses have been accepted by teachers not only because sometimes students leave them no other choice, but also because they solve some practical issues for teachers (e.g. no disruptions, students without textbooks or calculators, students taking notes more quickly).

In these examples, students know that referring to a possible educational use will give them the chance to negotiate with teachers more directly and use their mobiles more openly. Communication with peers is among the most hidden uses, which makes direct negotiation with teachers less likely. However, it takes place anyway and, depending on the class activity, teachers may turn a blind eye. This use includes face-to-face interactions with classmates mediated by phones and contact with

friends in other class groups or schools. Regarding communication with families, teachers tend to accept it to avoid conflicts with students. This connects to teachers' perception of a lack of support to enforce phone regulations. One event in Alte school (water cut) also showed that direct communication between students and their parents may overrule school authority in case of emergency.

These findings show that, in *negotiation in practice*, teenagers' phone use cannot be regarded as a totally hidden or regulated practice in school. It is a visible practice in which diverse uses are showing diverse boundaries for negotiation related to worlds of school, peers and family life intersecting in the phone use in school. Moreover, it shows how students are engaging in practices that are an extension of their way of using phones out of school to study and that also enable them to seek support while at school from peers and parents outside.

9.1.3. Teenagers are responding to diverse positionalities as students, peers and daughters/sons in the negotiation of their phone use in school

RQ3: How are teenagers orchestrating different positionalities in their use of mobile phones in school?

Five cases (Mario, Antonia, Vicho, Rosa-Maria, and Simona) showed how students negotiate their phone use on an individual level in schools. These students are responding to positionalities allowed and shaped by their relationships with teachers and peers in school, as well as by their relationships with peers and family members (mainly parents) out of school. This reinforces the idea of students bringing and performing practices beyond school walls presented in the previous section. Taken together, these findings show that students are participating in the cultural worlds of school, peers, and family life in their use of phones in school, in which they develop a self-understanding of themselves as a certain kind of student, friend, and daughter/son. Findings show that these five students are addressing and prioritising those positionings when negotiating their phone use.

Students are aware of their positioning in the classroom as students –e.g. good, bad, trustful– and use that information to generate their phone use strategies. For example, Rosa-Maria uses her positioning as a good student to use her phone almost freely, without even asking for permission. Other students balance and prioritise diverse resources to keep working on a certain identity as students, while considering their positionings as peers and family members. For example, Simona decides to use her phone surreptitiously and as little as possible to keep working on her positioning as a well-behaved student, while avoiding phone confiscation and thus preserve her communication with her mum and

her positioning as a sister. Another example is Antonia, who adopts a non-confrontational approach to negotiate her phone use, since she is aware that she creates tensions with teachers and her friends at school because of her intense use of phone to communicate with friends out of school.

Practices and perceptions of the five individual cases show that there are unique ways of using phones, which are acknowledged by others in the school and serve to find strategies to keep using them. Those strategies, as authoring practices, show that students do not harbour a generic desire to get their own way in their phone use, but that their wishes are informed by how they see and position themselves in the school setting as students. Thus, phone use does not work in opposition to school or teachers' practice, but in relation to and as a response to it. In other words, students' personal and everyday phone use in school found fertile ground not only in the worlds of family and peers, but also in the school world.

The findings of this study suggest changes in three relational aspects within the participating schools, which are redefining positionalities and boundaries between school, families, and peers, as well as changing students' daily experience in school. Firstly, parents have become *present* in school and classes in ways that sometimes overrule teachers' authority regarding phone use. Secondly, and related to the previous aspect, the teacher-student relationship is changing as students are using the "parents' card" to use their phones without consultation with teachers (cf. Haddon & Vincent, 2014). Moreover, the teacher-student relationship is redefining boundaries as teachers are stepping into students' everyday lives with their own phone use or interacting with them in ways that entail the use of phones, such as sharing videos or memes. Finally, students, in their phone use, are bringing to their lessons certain educational uses that are common for them outside school, such as taking pictures, or listening to music to increase concentration and relaxation during classes. Furthermore, students, with their phones, have access to a bond of support and safety in their communication with same-age peers, which also enables them to communicate with parents to ask them to pick them up when overwhelmed with schoolwork. In this way, students are authoring a certain way to be students in school.

Certainly, it is not possible to say to which degree schooling boundaries and students' experiences are changing because of students' phone use. However, it is possible to suggest that these changes are attached also to societal transformations in the way parents and their children are relating to each other, where children's safety becomes crucial (Van Abeele, 2016; Barron, 2014). Furthermore, certain features of the Chilean educational system may be also influencing the way phone use is connected to changes in schools, such as the central role given to parents to get involved in the education of their

children (Canales et al., 2016) and the difficult and sometimes overwhelming conditions for teachers and students in terms of workload (Cornejo, 2012).

9.2. Recommendations for phone use in school

The current situation portrayed in both participating schools shows the difficulty of getting rid of a phone use that is embedded in cultural worlds of school, friendship and family life, which are an essential part of contemporary youth life (cf. Livingstone & Sefton-Green, 2016). This is not just because of the importance of phones for teenagers, but also because the (re)production of those cultural worlds connects school authorities, parents, teachers, and students, exerting pressure in multiple directions. Moreover, accounts and research in different countries suggest that, even with national or state phone bans (e.g. Ott et al., 2018; Chrisafis, 2018; Khomami, 2017), the issue of students' phone use is in fact dealt in diverse ways by different schools, with many of them improvising their responses - as in the case of the two schools in this study (cf. Gao et al., 2017; Halpern, Piña, Vásquez, et al., 2016).

In this context, and drawing on the findings of this study, I would suggest three measures for schools in terms of how to deal with phone use. Firstly, phone regulations in schools need to consider at least three elements: responsibilities for different actors, distinctions between kinds of phone use, and possibilities for educational phone use. Regarding responsibilities, it is important for school authorities, teachers, parents, and students to be assigned different but connected roles in limiting phone misuse, educating others about safe phone use, and enforcing rules. In this regard, adults' phone use in school also needs to be addressed. In relation to kinds of phone use, different sanctions should be defined for different uses; also, it is necessary to determine when certain uses can be allowed or not. For instance, communication with parents and procedures in case of emergency are key issues. Finally, with respect to possible curricular phone uses, it is important for schools to take a stance, especially regarding how these devices will relate to other school-provided ones. This latter aspect becomes crucial in schools, such as the participating schools, where access to school-provided technologies or the Internet is limited.

A second recommendation would be to develop those regulations and sanctions with all the actors involved, including students. This relates to accountability, but also aims to give everyone the chance to identify several concerns that this study showed can differ greatly between teachers, school authorities, parents, and students. It is important to discuss opportunities related to phone use, identify risks for students and the school community, and determine the associated responsibilities.

This is important because it recognises the interconnection between actors who are “making it possible” for phone use to occur in school in the first place.

Finally, a third recommendation would be to educate adults and students about digital youth culture, mobile communication, and online risks. This could be done through national programmes or initiatives, but also seeing this process as a constituent part of the school community. This study shows, for example, that teachers know that technologies are important for their students on a personal and educational level, that some of their students may have sleeping problems, and that others can only communicate with their families during school hours. This kind of knowledge is invaluable and could be shared and discussed in schools, and eventually inform decision-making about phone use. Moreover, in this study, students are a key source of experiences and new trends. Instances like the unit on responsible social media use in Alte school (section 5.3.3.) become key educational moments, although in this example the more in-depth debate occurred just among students and not in the teacher’s presence. My point is that schools, as spaces for the everyday lives of their students, are sources of key knowledge about the topic of mobile phone use. Even unexpected events related to misuse are important opportunities to reflect and take decisions.

9.3. Contributions

The present study contributed in multiple ways to the research field of youth and digital technologies in terms of findings, methodology, and theory.

The first contribution has to do with its theoretical and methodological approach. This is one of the few studies in the intersecting field of youth and technologies to have examined students’ phone use in school with a holistic and connected approach. This refers to a study that, while focusing on students’ perspective and digital practices, sees them in connection with different people (adults and peers), with online and offline realms, and multiple context levels for phone negotiation: school, classroom, and the individual. This partly drew on a research design that combined data analysis with instrument construction, as well as participants’ involvement in data collection and analysis, and that, after fieldwork, kept the connections between teenagers’ relationships and phone negotiation levels. From the analysis, the findings provided a detailed account of what was taking place around students’ phone use in terms of rules, improvisation, negotiation, and daily encounters with other people, connecting diverse interests and concerns, which in most of the research on phone use in school has been done separately (e.g. Beland & Murphy, 2016; Ko et al., 2015; Garcia, 2012). Moreover, the study gained access to varied uses of phones by teenagers, such as educational, communication,

interactions, and misuse, across different moments and spaces of the school setting. These include classes, dead times, breaks, the classroom, and the school yard. The study also gained access to different teenagers and phone users within the class groups, who engaged in diverse ways with school and their everyday lives.

The sociocultural and practice theory theoretical approach adopted in this study made it possible to locate phone use within the school setting, while tracing the arrangements of positionalities, resources, and experiences of teen phone users across cultural worlds of school and everyday life (peers and family life). Although similar theoretical approaches –combining sociocultural, practice, or cultural domains (e.g. Holland et al., 1998) and spatial references (e.g. Leander et al., 2010)– have been used to study young people’s curricular use of technologies (e.g. Erstad, 2016; Kumpulainen, 2016; Burnett, 2015) or daily (digital) experiences across physical settings (e.g. Bulfin & Koutsogiannis, 2012), this study contributes in two ways. Firstly, among studies on mobile phone communication, this study is one of the few to examine the overlap of teenagers’ online and offline practices, as well as the negotiation involved in orchestrating diverse resources across cultural worlds (cf. Ito & Okabe, 2005). Secondly, among studies on youth, schooling, and technologies, the present study contributes to the still limited research on teenagers’ everyday digital lives in school by focusing on personal digital practice, not promoted or designed by schools, while exploring cultural and symbolic cross-boundary practices in one physical and institutional space.

Related to the previous point, the present study contributes to our understanding of the everyday (digital) lives of teenagers as a diversified sphere of their life, which is not exclusively related to peers and entertainment. This study distinguishes also their lives and positionings with family members within the school; in other words, understanding their digital lives in school as connected to ways of being students, friends, and daughters/sons. Research on digital practices in school tends to adopt a dichotomous approach to the study of cross-practices between school and everyday lives (e.g. Jocius, 2017; Bjørgen & Erstad, 2015; Kupiainen, 2011; Bulfin, 2008). Thus, the study provides more evidence that supports intersecting definitions of youth involving school, family, and peers (e.g. Livingstone & Sefton-Green, 2016) and stresses the importance of that multi-layered approach to keep examining students’ everyday digital lives in their schools.

Finally, this study contributes to the limited research conducted in Chile about young people’s digital practices and youth lives (e.g. Halpern, Piña, & Vásquez, 2016; Ureta et al., 2011). Most of the studies conducted in Chile on technology use and phone use have employed representative and quantitative samples (e.g. Livingstone et al., 2017; Ibieta et al., 2013; Hinostroza et al., 2011). Moreover, this study seems to be the first to explore young people’s use of digital technologies in school adopting a socio-

constructionist, holistic, and connected approach. In this way, this study provides data that can help interpret and deepen some existing findings, while also opening the door to new research in Chile (section 9.5.).

9.4. Limitations

In terms of limitations, this study prioritised a rich account of elements connecting to teenagers' phone use over a more in-depth analysis of those elements. For example, relationships such as parent-student, school authorities-teachers, or teacher-parents are identified, but more superficially analysed than the whole process of phone negotiation that these and other aspects entail. In other words, there was a trade-off between an in-depth account of a practice and a person participating and crossing the boundaries of diverse cultural worlds or selecting an aspect of that phone use. However, those aspects could serve to undertake future research (section 9.5.).

The findings of this study come from specific schools' settings and from work with a certain kind of students. I expect that the findings of this study could resonate with other school settings and student experiences in Chile and other countries (Cohen et al., 2007). However, it is important to be aware of some school realities and experiences that were not considered in this study. First, the schools selected were two state-subsidised private Chilean schools (Appendix B) in the Chilean capital, Santiago. Thus, rural, state, or private schools' realities were not considered. Second, the participating, although varied in terms of school engagement, hobbies, interests, family bonds, and socio-economic backgrounds, were not students struggling at school or at home. Moreover, they were not young people with disabilities or from minority ethnic backgrounds. Especially in the case of direct participants, their voluntary participation may lead to the enrolment of a certain kind of student. All of them appeared to have a similar level of engagement or commitment to the project and in school (probably except for Vicho), were not disruptive, and had no serious problems at school. Given its ethnographic, socio-constructionist, and qualitative approach, the present study did not look for representativity, but it is important to be aware of these contextual aspects that limit the transferability (Cohen et al., 2007) of the data to other contexts.

This study delved into everyday phone use in schools, however, there are some aspects of media-engaged teen years that did not appear much, particularly romance and sexuality (cf. Allen, 2015; Vanden Abeele et al., 2014). They did not show up during observations, except for some mentions about boyfriend/girlfriend relationships, which could be expected as they are intimate issues. Given the connected research design used, their absence from the observations meant that my follow-up in

interviews were limited in this respect. The data collection process and ethical considerations sought to make participants feel comfortable to share whatever they wanted (section 4.6.4.), however, I did not actively look for these aspects of their life to arise. Especially at the beginning of fieldwork, I did not want to jeopardise my bond with participants by forcing them to talk about intimate aspects of their life. Again, the research design and how I conducted the study had something to do with this. However, I also believe that, in order to delve into romantic or sexual issues linked to technology use, it would be necessary to employ a more specific research design for that purpose, which would be valuable in further research on digital everyday lives in school.

Finally, also related to methods, there were limitations in accessing students' phone misuse and online practices. The research design contemplated methods to access these aspects of everyday phone use of teenagers in school. Observations and interviews provided access to some misuse situations (e.g. working around regulations on energy cut; or cheating). Moreover, these two methods together with student-collected online dialogues also allowed me to access texting and online communication in school. However, there are many practices in the online realms that this study could not access, such as posting on social media, publication of multimedia, and specifically misuse that students work hard to maintain secret, such as accounts to talk about the school and teachers.

9.5. Future research

In light of what the study has revealed, young people's phone negotiation and everyday digital practices in schools need to be examined in greater detail. It is relevant to expand the study by delving deeper into certain relationships that were addressed more superficially. This is the case of parents' involvement in schools in relation to their children's digital practices. It is important to find out more about how parents become *present* in schools, and differences in the way they interact with school officials and teachers in dealing with their children's phone use and online activity. This research is especially important in Chilean schools, where parents' involvement in their children's school choice has long been a relevant trait (Canales et al., 2016; section 8.3.1.). Another relationship that needs further research is that between teachers and students around everyday digital practices. It has become especially important to explore how boundaries are being blurred or redefined in that relationship, for example, in the use of their phones (teachers' and students') in and out of school, as well as in students accessing different support and safety networks with peers and relatives.

It is necessary for future research to incorporate other students' realities; for example, other socio-economic or ethnic backgrounds that can lead to different positionings and strategies among students.

In Chile, this can open an interesting line of research based on some features and current trends in the educational school system. The Chilean school system is one of the most socio-economically segregated in the world (Bellei, Contreras, Canales, & Orellana, 2018; OECD, 2016). An educational reform to correct this and other issues has been in force since 2016. Although it is too soon to see its impact, research on students' digital lives in school can shed light on socio-economic differences in the context of an educational reform. Regarding ethnic backgrounds, although Chile has low immigration rates in comparison to most developed regions (United Nations, 2017), the migration rate has doubled in the last 12 years (INE, 2018), changing the class composition in many Chilean schools (Joiko & Vásquez, 2016; Barrios-Valenzuela & Palou-Julián, 2014).

Another way to deepen the findings presented is to extend the research scope, using the theoretical framework of cultural worlds and positionalities, to other settings, such as home or public space. Examining positionings and possible changes when phone negotiation is taking place in different physical spaces can provide a deeper understanding of negotiation strategies, while also revealing how young people are prioritising their various positionalities. Moreover, tracing specific digital practices such as schoolwork, communication with parents or peers, and leisure across settings can also extend the work done in this study to shed light on phone use across multiple settings, which would make it possible to explore new positionalities such as boyfriend/girlfriend or gender. Furthermore, it is important to keep developing methods to gain access to texting and other online interactions (cf. Eisenhart & Allaman, 2018) that involve students' participation, which could serve to trace new practices between online and offline realms.

Finally, it is necessary to examine in more detail how institutional settings, such as schools, are dealing with children's and teenagers' everyday digital practices. It would be especially relevant to explore students' age differences in connection with the enforcement of regulations, as well as multiple types of relationships with students' families and among teachers. Differences between schools with BYOD programmes and those with low curricular use of technologies are another area for further research. In the current context of public and media discussion about phone regulations in schools, of which France is a good example (Chrisafis, 2018), it is important to have access to more research on what schools are already doing and how that affects students and school communities as a whole, including teachers and families. In this regard, understanding schools as spaces for the everyday digital lives of students and other actors emerged as a key topic of further research.

9.6. Final remarks

Conducting this research was both challenging and thought-provoking for me. Before starting this project, I had not used ethnographic methods, or worked with young people as closely as I did here. I had to deal with a lengthy negotiation process to gain access to the field, and, once there, I spent long hours with students and teachers. Physically, this was draining sometimes. I had forgotten how cold Chilean state-subsidised schools are and how formal and suspicious school authorities can be. However, at the same time, I learnt so much about research design, ethnographic work, and about my participants and their phone use. Although some students were worried about my presence, overall, I managed to carry out what I had planned and developed a bond of trust with interviewees and students, which was one of the most important things for me. I was lucky to encounter such thoughtful and engaged direct participants. I never stopped feeling awkward with them in breaks or in some class activities, but I was pleased and grateful for the trust that I earned.

In terms of research design, I would describe my approach as an attempt to balance access to schools and students and being able to involve students in data collection and analysis. Without a direct contact to access schools myself, I felt that I needed to be careful when explaining the activities involved to school authorities and parents. My previous experience researching in state schools in Chile, plus a national teachers' strike in 2015, made me feel that being too innovative in terms of methods could put off adults and jeopardise my access to schools. Moreover, researching young people's technology and phone use is associated with moral panics, some of which were present among teachers and adults when accessing the field. Now, based on this experience, and feeling more confident about working with young people and adults in an institutional setting, next time I would try to incorporate a clearer participatory approach or more creative methods. Activities such as interviews about online dialogues, or group interviews, where prompts were used, proved to be rich opportunities for reflection and data collection. I believe that increasing young people's involvement and engagement can boost their reflectivity when explaining such mundane things as their mobile phone use and their relationships with various people.

Another challenge I faced, also related to ethnographic work, was dealing with and analysing data. The amount of data collected was certainly greater than I expected and went to such fascinating places that sometimes it was hard to stay on track. Conducting an exploratory study with a connected and relational approach also added to the struggle. Finding the right level of analytical depth, determining which anecdotes and events to include, and detecting patterns, themes, and events across data was at times difficult. But it was certainly worth it: in my view, I accomplished the exploratory aim of this study and obtained a detailed connected account of students' phone use in school. In this vein, the

theoretical concepts used in this study were tremendously helpful. Although their definitions were sometimes complicated, they provided me with a framework for exploration and connections of relationships, cultural resources, positionings, or strategies across worlds of school, peers and family life.

Apart from the amount of data collected and the connected approach adopted, I ascribe difficulties in analysing data to a change in my philosophical perspective that occurred during fieldwork and the subsequent data analysis. I initially defined this study as a broadly interpretivist study; however, my experience with participants and data analysis made me realise that I was being limited by a positivist approach underlying it. I realised that in my previous work as a research assistant in Chile, I analysed qualitative data looking for a truth; trying to discover something that was there across participants, and visible to everyone in the research team. In this study, I saw myself moving from Kvale's *miner metaphor* (2008) to that of the *traveller*; in other words, from being a researcher discovering knowledge to one constructing and co-constructing knowledge with my participants and from a particular positioning as a woman, a Chilean, a PhD student, an adult, and so on. In changing my approach to the data and to my research as a whole, data analysis became easier, which also translated to the writing process of the present document.

Finally, I would like to say that the experience of conducting this study made me reconnect with my teen self in the late 1990s in Santiago, Chile. I started this project motivated to a large extent by the possibility of exploring that youth culture in schools that could now be described as digital and mobile. As I finish this research, I am more convinced than ever that digital practices and phone use are playing an important role in the way we live our daily lives, and young people are not exempt from this. I completed this study, then, thinking that technologies, and more specifically mobile phones, are contested and have created moral panics in relation to school because of that hyper connection. Youth cultures and "unofficial practices" have inhabited schools for long time, but digital lives seem to have brought along new ways of being in schools, as well as a redefinition of relationships between parents, teachers, and students in schools and classrooms. Certainly, mobile phones are not the only elements producing changes, but focusing on their use and negotiation has shown how teenagers' digital lives in school are connected to various elements, such as parents-school relationships, school climate, curricular use of technologies, responsibilities in technology use, teacher relationships, students' well-being, personal concerns and expectations, peer relationships, and offline/online (dis)connections. In this regard, those digital lives are not totally disconnected from schools and teachers, which may have been the case for me and my friends 20 years ago; instead, they are part of and are grounded in what is taking place in schools.

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Appendices

Appendix A: Map of Chile – location of fieldwork

Data collection was carried out in two schools in Santiago, Chile (Image A.1).

Figure A.1.: Map of Chile, location of Santiago city



Source: South America map [Online image]. Retrieved November 5th, 2018 from <https://steamcommunity.com/sharedfiles/filedetails/?id=650093610>

Appendix B: Chilean educational system – general statistics

Participants were students from two *Segundo Medio* classes (15-16 years old). This is the second year of the *Educación Media* levels (Table B.1). *Segundo Medio*'s equivalent year in the UK School Educational system is Year 11.

Table B.1.: Structure of the Chilean educational school system

Chilean name of level groups	<i>Educación Pre-escolar</i>	<i>Educación Básica</i>		<i>Educación Media</i>
ISCED* name of level groups	Early childhood and pre-primary education	Primary education	Lower secondary education	Upper secondary education
Theoretical Age range	0-5	6-11	12-13	14-17
Duration of the programme in years	Varies, only 5-years-old level is mandatory.	6	2	4
Programme orientation	na	General	General	General or Vocational

Based on UNESCO (2011)

Note: Special and adult education are not considered here.

*ISCED: International Standard Classification of Education (UNESCO, 2011).

Both schools in the present study were state-subsided and private-owned schools in 2015, year of fieldwork (table B.2).

Table B.2.: Number of Chilean schools* by type, 2015

Name in relation to main source of funding	Name in relation to who owns the school	Name in Spanish	Number	%
State-subsided schools	Council	<i>Municipal</i>	5,279	44
	Private	<i>Particular subvencionado</i>	6,060	50.5
	Corporation	<i>Corporación de Administración Delegada</i>	70	0.5
Private-funded schools	Private	<i>Particular Pagado</i>	592	5
Source: (MINEDUC, 2016)			TOTAL	12,001
				100

*All schools offering pre-primary, primary, and secondary educational levels. This includes general and vocational programmes and adult education.

Table B.3.: Enrolment in Chilean schools* by type of school, 2015

Name in Spanish	Number	%	Accumulated %
<i>Municipal</i>	1,290,770	36.4	36.4
<i>Particular subvencionado</i>	1,935,222	54.5	90.9
<i>Corporación de Administración Delegada</i>	45,852	1.3	92.2
<i>Particular Pagado</i>	276,892	7.8	100
TOTAL	3,548,736	100	

Source: (MINEDUC, 2016)

*Enrolment in all schools offering pre-primary, primary and secondary levels. This includes adult and special education, as well as general and vocational programmes.

Table B.4.: Percentage of schools by 2012 Digital Development indexes (DDI), levels, and type of school*

Indexes levels		<i>Municipal</i>	<i>Particular Subvencionado</i>	<i>Particular Pagado</i>
Facilities and Equipment	Basic	11.40	14.50	6.70
	Intermediate	47.50	66.50	65.10
	Advanced	41.10	19.00	28.20
Management	Basic	5	4	8
	Intermediate	73	77	75
	Advanced	22	19	18
ICT Use	Basic	11	11	15
	Intermediate	87	89	84
	Advanced	1	1	1

Source: Adimark & Enlaces (2013)

*National Census of Educational Computing (Adimark & Enlaces, 2013) did not include information of Corporation schools.

Appendix C: Pre-pilot Study

The Pre-pilot Study took place between August and November 2014 with two Chilean teenagers (table C.1.) living in the UK. I contacted both of them –Mateo and Elisa (pseudonyms)– through one of their parents. After they consented, I invited each participant directly to be part of the pilot study. In the case of Mateo, I invited him through Skype (he lived in London) and with Elisa I went to her house in Bristol. Additionally, before data collection, I had an Informal conversation with each of them to know them better and gain trust.

Table C.1.: Pre-Pilot study participants’ details, aims, and activities

Participants	Mateo	Elisa
Age	16	13
Location	London	Bristol
Years living in the UK	1 year	2 years
Digital technologies most used at home	PC Laptop Smartphone	Laptop iPad Mobile phone
Original pre-pilot’s aims	<ul style="list-style-type: none"> -Test viability and practicalities of using observations to study teenager’s daily activities at home. -Test preliminary interview guides. -Test the use of data support tools: field notes, diary and photos. -Collect participant’s impressions and suggestions on the pilot study. 	<ul style="list-style-type: none"> -Test viability and practicalities of using observations to study teenager’s daily activities at home and school. -Test the use of observational data and field notes to elaborate interviewing guides. -Collect data on participant’s peer relationships. -Collect participant’s impressions and suggestions on the pilot study.
Achieved activities	<ul style="list-style-type: none"> -Informal face-to-face conversation on Skype. -Observation at home over two consecutive days. -Individual interview at home. -Skype conversation on the pilot experience. 	<ul style="list-style-type: none"> -Informal face-to-face conversation. -Observation at home for two non-consecutive days -Individual interview at home. -Interview on one school day (reconstruction of events). -Conversation on the pilot experience.

The aim of this pre-pilot was to test a preliminary research design based on my interest on students’ daily digital practices in different contexts. This was done to refine the research focus and questions for the Main Study. It also served to try out ethnographic methods for the first time and gain confident in using them.

Mateo and Elisa provided me with their insights about the activities conducted, my presence during my time with them, and other possible ways of doing things, such as use of video cameras, or accessing their online daily behaviours. In terms of their evaluation of their experience in the pre-pilot study, both gave me positive feedback of the activities and the way I approached them before and during

data collection. Both described their participation as an opportunity to reflect. Another thing they mentioned is that my presence had some impact in the way they behaved. Both recognized that while doing the observations they were trying to find out how to help me, and in that regard, they might have changed their behaviours a little bit. For example, Mateo said he felt “pushed” to use technologies because that was the focus of my visit; while Elisa confessed she was worried about which place would be better for me to observe her.

Regarding things that could have been different, Mateo said that a video-camera might have made him feel less observed, but he also mentioned this could be unethical as you do not know where the camera is pointing. We also talked about good ways to gain access to their online behaviour. Elisa said that she would not have minded having me as a friend on Facebook or Instagram. However, she would not have been willing to let me observe the content of her personal messaging with her peers. In this matter, she would have preferred to tell me, or selected some messages herself, but not give me access to all her online communication.

Apart from giving me the chance to try out new things, this experience made me reflect about what I wanted to do for my Main Study. One of the main insights gained from this experience was about the rich data gathered from observations, especially when connected with interviews. But probably more importantly, I realised that the school setting, and the relationship between everyday digital practices, such as peer communication –embedded in institutional worlds– was something I wanted to focus on.

Appendix D: Pilot Research Study

The Pilot Study took place in Santiago, Chile in July and August 2015 and had two parts. The first phase aimed to get feedback from Chilean teenagers about the Research Design of the project. Phase two aimed to test data collection methods in school: students' questionnaire, individual and group interviews, and observations in breaks and classes. The first phase was not something planned in advance. It was a response to difficulties in finding schools for the original Pilot and Main Studies due to a recently-finished national teachers' strike. I got concerned at some point that if I was not able to find schools, I would have to prioritise the Main Study, accepting the possibility of not having a school for the Pilot Study. During that search, a plan B (phase one) was developed to cover at least one of the aims of the Pilot study, namely testing the students' questionnaire and getting feedback on the Research Design from Year 11 students. More specifically, on my strategies to gain access to schools, select participants, and collect data. Four teenagers attending Year 11 participated in his phase. Table D.1. shows in more detail the aims and activities conducted for phase one of the Pilot Study.

Table D.1.: Pilot study's phase one original aims and activities conducted, July 2015

Original aims – Phase one	<ul style="list-style-type: none">-To get feedback and reflections from teenagers attending Year 11 about the possibilities they see and ways to improve the research design. More specifically about:<ul style="list-style-type: none">- Project's presentation slides.- How to approach parents and get consent from them.- Observations during classes.- Participant observations and informal conversations during breaks.- Out-of-school interview.- Collection of online data by themselves.-To pilot the students' questionnaire with teenagers attending Year 11.
Achieved activities – Phase one	<p>Four face-to face individual conversations with Chilean teenagers attending Year 11 in Santiago. Three male teenagers and one female teenager.</p> <p>In each of these instances:</p> <ul style="list-style-type: none">-I showed the presentation slides of the project to the participant.-We talked about what they thought of the project, the activities, and problems they saw could arise in engaging students, getting informed consents, and collecting data.-I administered the students' questionnaire and discussed it with the participant.

In Phase one, the four interviewed teenagers reported that although the project looked interesting, they thought some classmates would say no because they were lazy, and that selecting just a few students from the class may generate jealousy among friends. These insights made me plan answers to possible doubts or concerns during my initial approach to the participants. Moreover, I made some changes to improve the project's presentation slides (Appendix E.2.), which served to motivate students to participate in the Main Study. Participants also provided feedback on the students' questionnaire, which served to amend the instrument to its final version (Appendix G). Overall, the Pilot study participants thought that the study would be feasible and that it sounded like something different to do, which they saw as a positive aspect.

Phase two of the Pilot Study aimed to test data collection methods with students from one Year-11 class in Bosque school. More specifically, the plan was to test those methods in a small-scale version of the Main Study. This included: combining different observations and interviews in one day of data collection, as well as selecting two key informants to focus on during each day I visited the school. The Pilot Study lasted two consecutive days in the school (table D.2.). Later, in August, instructions and a self-administered questionnaire to collect online dialogues was given to one of the two key informants. The original plan also included piloting a home interview with one of the key informants. Unfortunately, this was not possible mainly because of time constraints caused by the National teachers' strike and overlap with the Main Study.

Table D.2.: Pilot study's phase two original aims and activities done, July-August 2015

Original aims – Phase two	<ul style="list-style-type: none"> -To test participant observations and interviews with students and teachers from 10th grade in school. More specifically: <ul style="list-style-type: none"> -How much and what kind of information am I able to collect about students' daily use of technologies? -How does it work to conduct these methods on the same day and on consecutive days in a row (including note-taking on paper and voice, length and number of class and breaks observations, for example)? -Which are good locations to observe inside and outside the classroom? Is it possible to take notes during breaks? -How to improve the constructions of instruments? -How to connect observations and interviews? -To test the application of student-collected online data instrument. -To test one interview at one student's home.
Achieved activities – Phase two	<ul style="list-style-type: none"> -Two consecutive days - July 2015 – Bosque school <ul style="list-style-type: none"> -Application of students' questionnaire in one Year-11 class. -Participant observations in classes for two consecutive days. -Participant observations in breaks and lunch time with 2 key informants (volunteers). One each day. -2 Individual interviews with the direct participants about school routines and personal routines at school, opinion about school, use of digital technologies and mobile phone. -2 Individual interviews with teachers who participated in observed classes. -1 group interview with other students from the same class. -August 2015 – one student from Bosque school class <ul style="list-style-type: none"> -Instructions and self-administered questionnaire (open questions) to select online dialogues were sent to one of the key informants. -Key informant completed the questionnaire and sent it back, also selecting dialogues and providing feedback about the experience.

In terms of insights learnt from phase two of the Pilot study, the main ones are the following.

1. I realised that spending whole days observing in the school hindered my attention span, so it was better to plan observations in a range of two subjects and a break (breaktime or lunchtime), and three subjects and two breaks as a maximum. An interview on the same day was also feasible and provided interesting insights about what had happened that same day.
2. I decided that I would only take fieldnotes during classroom observations. Notes during breaks and lunches would be taken afterwards as soon as I found the time to do it. This would benefit my

interactions and bond with the participants, but would also enable me to be less conspicuous in my role as researcher, encouraging students to do what they generally do during breaks. I wanted to be part of their spare time at school, and not an external agent.

3. The focus on each key informant and friends during breaks worked fine. I confirmed that informing who would be key informants to the class and tutor teachers made my presence less ethically problematic in the school. However, during classes there are situations where paying attention to both informants was important. There are activities or situations that involved the whole class as well. Overall, focusing on one key informant per day, I decided, was important for planning.

4. The Pilot Study showed me that my original plan of interviewing head teachers and class teachers at the beginning of fieldwork was not the best to follow up data. I realised that to understand unexpected events and practices, it would be more helpful to interview teachers throughout the whole fieldwork.

5. From interviews and preliminary data analysis, I confirmed that it was key to connect observational and interview data. Interviews, especially after the first one, would be essential to delve into the events and digital practices in which participants and school staff engage, as well to understand more about school culture and routines.

6. Regarding asking participants to collect their own data (online dialogues), I improved the instruction sheet (Appendix H.2.) and added a face-to-face conversation to explain the procedure. I also turned the self-administered questionnaire with open questions into a face-to-face interview guide (Appendix H.2.).

7. The Pilot Study was conducted with a focus on students' digital practices (mainly with peers) taking place in the school, and not exclusively on mobile phone use. I was aware that most everyday digital experiences in school would come from that source, especially in the Chilean schools where there are no National BYOD or 1:1 programmes. However, the experience in Bosque school started shaping my perspective into a focus on the mobile phone practices in an interplay of diverse elements (educational and non-educational) and with different people. This approach became more refined at the beginning of data collection in the Main Study.

Appendix E: Access letter and project's presentation slides

The schools' access letter (E.1.) and the project's presentation slides (E.2.) are presented here. Both were originally in Spanish. In the case of the slides, I present the translated version (own work). A Spanish translation was added next to each slide.

E.1. Access letter for schools

Invitations for schools to participate

My name is Paulina Ruiz and I am doing a PhD in Education at the University of Bristol, England. My project's title is "Digital practices and identities in the school. An ethnographic study with Chilean teenagers". I am currently in Chile for the data collection stage of my project.

This document aims to present the key aspects of my study in order to help you to decide on the school's possible participation in it.

Project's aims

The aims of this study are: 1) To explore how Chilean teenagers are using digital technologies daily in different contexts and 2) to understand how –through that use– they are constructing their identities as students and young people within the school space.

Participants and school

The study is looking to work with a *Segundo medio* class and more directly with 6 students from the same class within a *municipal* or *particular subvencionado* [Appendix B.2.], co-educational, and *científico-humanista* [with a general programme] school from Santiago city.

Activities to be conducted

The research design considers a 3-month data collection phase, starting in August 2015, and is divided into three stages:

A getting-familiarised stage, where I will observe the daily routines of the selected *Segundo medio* and carry out some interviews with school authorities and teachers.

In the second stage, I will conduct individual activities with the 6 selected participants to know about their daily routine with technologies in and out-of-school. To do this, I will conduct participant observations, individual interviews, and I will ask them to collect data themselves to be reviewed and discussed together in the individual interviews.

Finally, in the third stage, I will conduct group interviews with the students to delve deeper into their technology use in the school space. This stage may also include more observations and individual interviews.

School's participation

The school participation is completely voluntary and does not involve any kind of pressure or assessment for yourself or your students.

During data collection, the school does not need to change anything from its regular planning. On the contrary, this study looks for data reflecting the daily lives of students and their use of technologies.

However, I will require help in gaining access to students and their families, as well as coordinating observations and interviews at school.

Voluntary participation and confidentiality

In order to conduct this study, a written informed consent will be asked to be signed by all participants and the 6 selected participants' parents. Participants will have the right to withdraw at any moment up to two weeks after data collection is over.

All data collected during this process will be anonymous and nobody, except for me and my supervisor, will have access to this material.

Paying back

Once data collection is over, I plan to present my preliminary findings and, afterwards, give the final findings to the school.

Moreover, I am more than happy to carry out workshops or presentations about any topic related to the project that could be of interest to the school as a way of compensating you for your support.

I would be delighted to meet in person to discuss or solve your doubts about the project. If you so wish, you can contact my supervisor, Dr. Sally Barnes [email] to know more about the project.

Yours faithfully,

Paulina A. Ruiz Cabello

PhD in Education (c)

University of Bristol, England

[phone number]

[email]

E.2. Slides to present the Project

The slides were first used with students, then used in one school meeting with teachers (Alte school), and finally in a parents’ meeting in both schools. Each slide reflects one click in the Prezi presentation. Screenshots were retrieved from prezi.com on 14th August 2018.



Digital practice and identities
in the school space

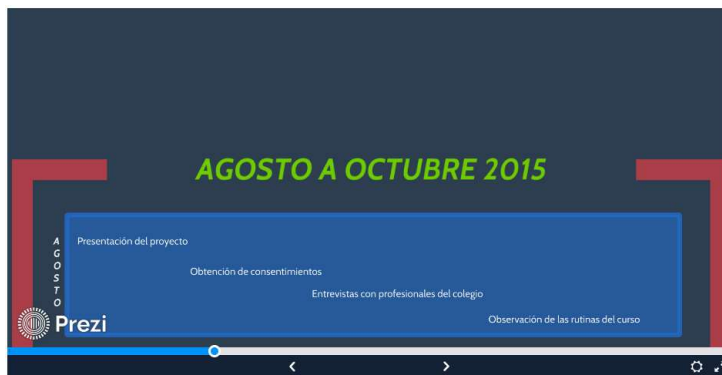
Paulina Ruiz
University of Bristol, England



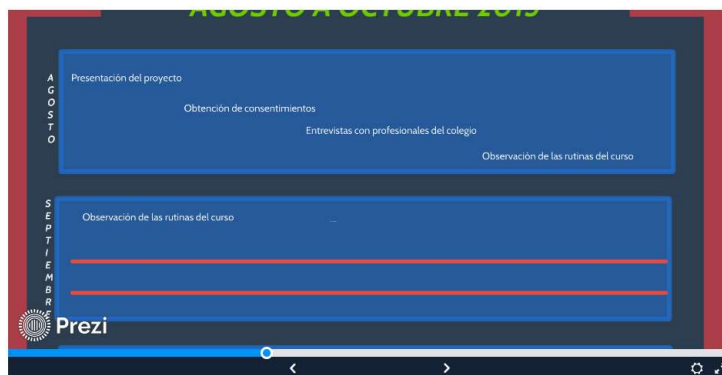
To understand the daily use
of digital technologies by
teenagers in the school

↓

Identities as young people
and students



FROM AUGUST TO OCTOBER
2015



AUGUST

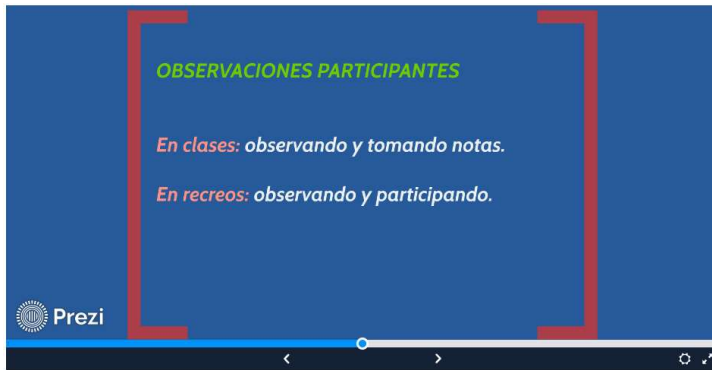
- Presentation of the project
- Getting informed consents
- Interviews with school professionals
- Observations of class' routines

SEPTEMBER

- Observations of class' routines



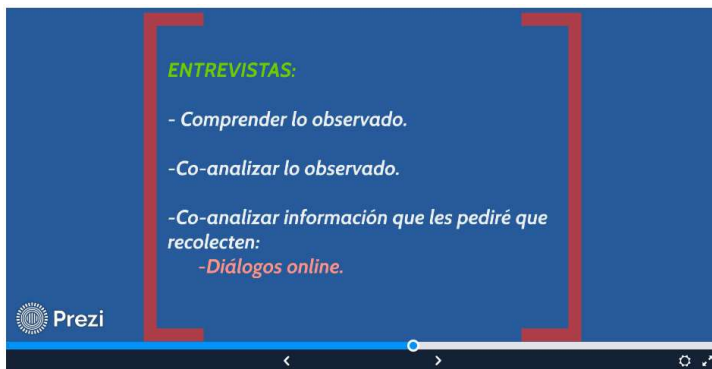
4 PARTICIPANTS



PARTICIPANT OBSERVATIONS

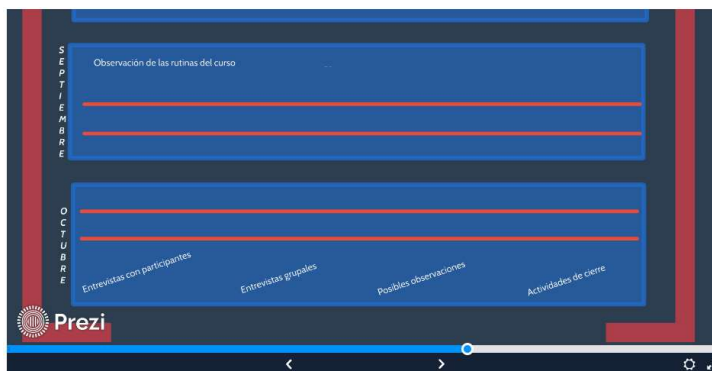
In classes: observing and taking notes

In breaks: observing and participating



INTERVIEWS

- Understand the things observed
- Co-analyse the things observed
- Co-analyse information you will collect:
 - Online dialogues



SEPTEMBER

Observation of class' routines

OCTOBER

Interviews with participants

Group interviews

Possible observations

Closing activities



Participar es una oportunidad para:

- Reflexionar sobre tus actividades cotidianas y temas de tu interés.
- Aprender de investigación social.
- Participar de estudio novedoso.
- Contribuir a un comprender mejor cómo se es joven y cómo se usan tecnologías.

Prezi

Participating is an opportunity for:

- Reflecting on daily activities and your own interests
- Learning about social research
- Joining an innovative study
- Contributing to our understanding of what it is to be a young person and how

¿Cómo se usarán los datos?

- Datos para mi tesis.
- Posibles publicaciones y presentaciones.
- No evaluación.
- Se resguardará anonimato, confidencialidad y derecho a abandonar el estudio.

Prezi

How will data be used?

- Data for my dissertation
- Possible publications and presentations
- No assessment
- Anonymity and confidentiality, and right to withdraw will be guaranteed.

¿Cómo seleccionaré a los participantes?

- Participación voluntaria + consentimiento de apoderado
- Criterios para elegir:
 - 2 mujeres y 2 hombres.
 - Variedad en el uso de tecnologías.
 - De distintos grupos de amigos.

Prezi

How will I select participants?

Voluntary participation + guardian's informed consent

Selection criteria:

- 2 girls and 2 boys
- Variety in the use of technologies
- From different group of friends

Prácticas digitales e identidades en el espacio escolar

Proyecto de investigación

Resumen de actividades

Prezi

Appendix F: Informed consents

The following table (F.1.) presents all the informed consents and information letters handed and returned during data collection. All were originally in Spanish and translated by the researcher.

Table F.1.: Informed consents collected during data collection

Location in this appendix	Kind of informed consent and/or information letter	Moment of the study	Process
F.1.	Information letter and informed consent for direct participants	Phase 0 - accessing to the field	Handed and discussed in person with each direct participant. Participant could sign the informed consent at that moment or later.
F.2.	Information letter and informed consent for direct parents or guardians	Phase 0 - accessing the field	Handed to the direct participant in person. One parent or guardian had to sign the informed consent and return it to the researcher via his/her child or pupil.
F.3.	Information letter and informed consent for indirect participants	Phase 0 - accessing the field	Handed and discussed in front of the whole class. Gave them time to read and ask questions. Participant could sign the informed consent at that moment or later.
F.4.	Information letter for indirect participants' parents or guardians	Phase 0 - accessing the field	Handed to the indirect participant in person.
F.5.	Informed consent for head teachers and class teachers	Phase 1 or Phase 2 Before interviewing head teachers and teachers	Handed and discussed in person. Had to be signed before interview.
F.6.	Informed consent for group interviews with indirect participants	Phase 2 Before interviewing students.	Handed and discussed in person. Had to be signed before interview.
F.7.	Informed consent to use online dialogues for academic purposes	Phase 2 After interview about dialogues took place, before leaving the field.	[Consent was requested by direct participants first (for interviews on dialogues)] Handed and discussed in person. Had to be signed in that meeting.

F.1. Information letter and informed consent for direct participants

Information about the project for direct participants “Digital practices and identities in the school space”

What is the aim of the research project?

The aim of my research is to explore and understand how Chilean teenagers are using digital technologies in the school space, and how they are constructing their identities as young people and students through that use.

Who will participate in the research project?

Students from your class, teachers and the head teacher. Four students from your class will participate as direct participants.

What does being a direct participant involve?

Being a direct participant entails getting involved in the process of data collection and analysis I will carry out between August and October 2015 in your class. My aim is to understand, from your point of view, your daily use of technology in the school space.

In doing this, I plan to observe and spend time with you in some classes and breaks. Moreover, you will collect some online data to understand your use of digital technologies with peers and other people. Finally, you will participate in interviews with me to discuss and analyse together the information we have collected at school and your home.

Your participation as direct participant requires approximately seven days of your time. Roughly, some days in a week to conduct the activities mentioned above, and then –after working with all the direct participants– a couple of days for a group interview and a final individual interview.

How will your voluntary participation and confidentiality of your participation be ensured?

Your participation is absolutely voluntary and does not involve any kind of pressure or assessment for you. Moreover, you can decide to withdraw at any moment during the data collection process.

All the information collected will be anonymous and nobody, except for me and my supervisor, will have access to the content of this material, including your friends, classmates, teachers, or relatives.

I will hand you this document for you to read and keep it, and an informed consent for you to sign. Signing this consent establishes an ethical commitment where anonymity and data protection are guaranteed throughout the project and its publication. For the same reason, I will hand another informed consent for one of your parents or guardians to sign before the beginning of the data collection phase.

How will the findings of this study be disseminated?

The collected information and its analysis are part of my dissertation to obtain a Doctoral degree in Education. Furthermore, I plan to publish this study in academic journals and disseminate it in academic conferences.

In all these instances, your anonymity will be guaranteed, as well as that of other people involved in the project. This includes your name, the name of your school, and the area where you live.

I will be delighted to send you the final results of this study if you want to.

Please, do not hesitate to let me know if you have any doubts, concerns, or comments about your participation in the project. Thank you very much for your interest.

Yours faithfully,

Paulina Ruiz Cabello

Email: [email]

Phone: [phone number]

Informed consent for direct participants
Research project: Digital practices and identities in the school space

1. I have read and Paulina Ruiz has explained to me the content of the document describing the project. Paulina has satisfactorily answered my doubts.
2. I understand the project's aims and what my participation in it entails. I agree with the activities mentioned in the document describing the project and my participation in it.
3. I understand that my participation in the project is absolutely voluntary and that I can withdraw from the project at any point of the data collection process.
4. I understand that all the information collected will be confidential and anonymous, and that some extracts could be anonymously published or presented as part of academic work.

I voluntarily agree to participate in Paulina Ruiz's project about the use of digital technologies by Chilean teenagers.

Name: _____

Signature: _____

Researcher's signature: _____

Santiago, _____, 2015

F.2. Information letter and informed consents for direct participants' parents

Information about the project for parents or guardians – direct participants “Digital practices and identities in the school space”

My name is Paulina Ruiz and I am doing a PhD in Education at the University of Bristol, England. I am now in Chile for my project's data collection phase, for which I have the support of [name of the school] school. In this context, your pupil has shown interest in participating in the project as a direct participant.

This document aims to present the key aspects of my study in order to help you to decide about the participation of your pupil in it as a direct participant.

What is the aim of the research project?

The aim of my research is to explore and understand how Chilean teenagers are using digital technologies in school, and how they are constructing their identities as young people and students through that use.

What does being a direct participant involve?

Being a direct participant entails getting involved in the process of data collection and analysis I will carry out between August and October 2015 in your pupil's class. My aim is to understand, from your pupil's point of view, his/her daily use of technology in the school.

In doing this, I plan to observe and spend time with your pupil in some classes and breaks. Moreover, I will ask your pupil to collect some online data to understand his/her use of digital technologies with peers and other people. Finally, your pupil will participate in interviews with me to discuss and analyse together the information we have collected at school and home.

Participation as direct participant requires approximately seven days. Roughly, some days in a week to conduct the activities mentioned above, and then –after working with all the direct participants– a couple of days for a group interview and a final individual interview.

How will participants' voluntary involvement and confidentiality be ensured?

Your pupil's participation is absolutely voluntary and does not involve any kind of pressure or assessment for him or her. Moreover, he/she can decide to withdraw at any moment during the data collection process.

Before starting the data collection process, I will orally explain to each direct participant the conditions of his/her participation and I will hand an informed consent for him/her to sign. This consent establishes an

ethical commitment between the researcher and the participant, in which anonymity and data protection are guaranteed throughout the project and its publication.

How will the findings of this study be disseminated?

The collected information and its analysis are part of my dissertation to obtain a Doctoral degree in Education. Furthermore, I plan to publish this study in academic journals and disseminate it in academic conferences.

I will be delighted to send you the final results of this study if you so wish.

Please do not hesitate to contact me or my supervisor, Dr. Sally Barnes [email], if you have any questions.

Yours faithfully,

Paulina Ruiz Cabello

Sociology Degree, Universidad Católica de Chile

Master in Social Communication, Universidad Católica de Chile

Email: [email]

Phone: [phone number]

Informed Consent for direct participant's parent or guardian
Research project: Digital practices and identities in the school space

1. I have read the document describing the project. The researcher (Paulina Ruiz) has satisfactorily answered my doubts and has given me her contact details in case I needed to contact her.
2. I understand the project's aims and what my pupil's participation in it entails. I agree with the activities mentioned in the document describing the project and his/her participation in it.
3. I understand that my pupil's participation in the project is absolutely voluntary and that she/he can withdraw from the project at any point of the data collection process.
4. I understand that all the information collected will be confidential and anonymous, and that some extracts could be anonymously published or presented as part of academic work.

I accept my pupil's participation in Paulina Ruiz's project about the use of digital technologies by Chilean teenagers.

Your pupil's name: _____

Name: _____

Signature: _____

Researcher's signature: _____

Santiago, _____, 2015

F.3. Information letter and informed consent for indirect participants

Information about the project for students – indirect participants “Digital practices and identities in the school space”

This document aims to present key aspects of the study I will be conducting in your class between August and October 2015 in order to help you decide whether to participate in it.

What is the aim of the research project?

The aim of my study is to explore and understand how Chilean teenagers are using digital technologies in school, and how they are constructing their identities as young people and students through that use.

Who will participate in the research project and what does being a direct participant involve?

Students from your class, teachers, and the head teacher will participate in this project. Four classmates will participate as direct participants.

Direct participants will be involved in observation in classes and breaks; collect online data about their use of technologies in the school; and participate in interviews with me to discuss and analyse together the information we have collected.

In which way could you be involved in this project?

You will not be a direct participant in this project; however, you could be indirectly involved in some of the activities planned. This is why handing this document to you is important, so you can solve any questions you have about the project.

In which activities could I be indirectly involved?

You could be indirectly involved in at least one of the following planned activities:

-During observations conducted in classes or breaks. These activities will focus on the direct participants; however, you could be part of the observations in classes, or through informal conversations with me or in your interactions with the direct participants.

-In online dialogues the direct participants will be collecting. In this case, the relevant direct participants will ask for your permission to collect and discuss those dialogues with me.

Could you have a direct participation in this project?

Depending on your role in the class and in the daily activities of the direct participant, it may be relevant to ask for your consent to conduct an interview with you or to use online dialogues you are involved in (always anonymously) for academic purposes.

This document does not express your consent to do these activities. Consent will be requested if you get involved in them.

How will participants' voluntary involvement and confidentiality be ensured?

Your participation is absolutely voluntary and does not involve any kind of pressure or assessment for you. Moreover, you can decide to withdraw at any moment during the data collection process.

All the information collected throughout the study will be anonymous and nobody, except for me and my supervisor, will have access to the content of this material, including your friends, classmates, teachers, or relatives.

Please do not hesitate to let me know if you have any doubts, concerns, or comments about your participation in the project.

Yours faithfully,

Paulina Ruiz Cabello

Email: [email]

Phone: [phone number]

Informed Consent for indirect participation
Research project: Digital practices and identities in the school space

1. I have read and Paulina Ruiz has explained to me the content of the document describing the project. Paulina has satisfactorily answered my doubts.
2. I understand the project's aims and what my indirect participation in it entails.
3. I am aware that my consent will be requested if I am interviewed or if my authorisation is needed to use online dialogues am I involved in for academic purposes.
4. I understand that my participation in the project is absolutely voluntary and that I can withdraw the project at any point of the data collection process.
5. I understand that all the information collected will be confidential and anonymous.

I voluntarily agree to participate in Paulina Ruiz's project about the use of digital technologies by Chilean teenagers.

Name: _____

Signature: _____

Researcher's signature: _____

Santiago, _____, 2015

F.4. Information letter for indirect participants' parents

Information about the project for parents or guardians - indirect participants "Digital practices and identities in the school space"

My name is Paulina Ruiz and I am doing a PhD in Education at the University of Bristol, England. I am currently in Chile for my project's data collection phase, for which I have the support of [name of the school] school.

This document aims to provide you with information about my research project, which I will be conducting with [selected class] between August and October 2015.

Project's aim

The aim of my study is to explore and understand how Chilean teenagers are using digital technologies in the school, and how they are constructing their identities as young people and students through that use.

Participants and direct participants

Your pupil's class, as well as teachers and the head teacher will participate in this project. Four students from your pupil's class will participate as direct participants.

Direct participants will be involved in observation in classes and breaks; collect online data about their use of technologies in the school; and participate in interviews with me to discuss and analyse together the information we have collected.

Indirect participation

Your son/daughter or pupil will not be a direct participant in this project, however, he/she could be indirectly involved in at least one of the following planned activities:

-During observations conducted in classes or breaks. These activities will focus on the direct participants; however, your pupil could be part of the observations in classes, or through informal conversations with me or in his/her interactions with the direct participants.

-In online dialogues the direct participants will be collecting. In this case, the relevant direct participants will ask for permission to your pupil to discuss those dialogues with me. Additionally, I will ask your pupil for his/her consent to eventually use those dialogues for academic purpose.

Eventually, your pupil may be invited to participate in a group interview with other classmates in the school. In this case, I will ask for his/her consent to participate.

Voluntary participation and confidentiality

All students' participation in this project is absolutely voluntary and does not involve any kind of pressure or assessment for them. Moreover, they can decide to withdraw at any moment during the data collection process.

Furthermore, anonymity and data protection are guaranteed during data collection and the eventual publication of the study.

Dissemination of the project's findings

The collected information and its analysis are part of my dissertation to obtain a Doctoral degree in Education. Furthermore, I plan to publish the study in academic journals and disseminate it in academic conferences.

Please do not hesitate to contact me or my supervisor, Dr. Sally Barnes [email], if you have any questions.

Yours faithfully,

Paulina Ruiz Cabello

Sociology Degree, Universidad Católica de Chile

Master in Social Communication, Universidad Católica de Chile

Email: [email]

Phone: [phone number]

F.5. Informed consent for head teachers' and teachers' interviews

Informed consent for interviews with head teachers and teachers Research project: Digital practices and identities in the school space

1. The researcher, Paulina Ruiz, has explained her research project to me and has satisfactorily answered my doubts.
2. I understand the project's aims and what my participation in it entails.
3. I understand that my participation in the project is absolutely voluntary.
4. I understand that all the information collected will be confidential and anonymous, and that some extracts could be anonymously published or presented as part of academic work.

I voluntarily agree to participate in Paulina Ruiz's project about the use of digital technologies by Chilean teenagers.

Name: _____

Signature: _____

Researcher's signature: _____

Santiago, _____, 2015

F.6. Informed consent for group interview with indirect participants

Informed consent for group interviews with students
Research project: Digital practices and identities in the school space

- 1. The researcher, Paulina Ruiz, has explained to me my participation in an interview that is part of the project she is doing in the school. She has satisfactorily answered my doubts.
- 2. I understand the project’s aims and what my participation in this interview entails.
- 3. I understand that my participation in the project is absolutely voluntary.
- 4. I understand that all the information collected will be confidential and anonymous, and that some extracts could be anonymously published or presented as part of academic work.

I voluntarily accept to participate in Paulina Ruiz’s project about the use of digital technologies by Chilean teenagers.

Students’ names	Signature

Santiago, _____, 2015

F.7. Informed consent to use online dialogues for academic purposes

Authorisation to use online dialogues for academic purposes **Research project: Digital practices and identities in the school space**

1. The researcher, Paulina Ruiz, has explained to me the academic use she is planning to give to online dialogues in which I am involved. They have been collected as part of her research project in the school. She has satisfactorily answered my doubts.
2. I understand the project's aims and the academic purposes that could be given to the online dialogues I am involved in.
3. I understand that my authorisation to use online dialogues for academic purpose is voluntary.
4. I understand that the online dialogues will be used guaranteeing confidentiality and anonymity, and that some extracts could be anonymously published or presented as part of academic work.

I authorise Paulina Ruiz to use online dialogues where I am involved for academic purposes, as part of her project about the use of digital technologies by Chilean teenagers.

Students' names	Signature

Santiago, _____, 2015

STUDENT QUESTIONNAIRE

The following questionnaire is part of the project “Digital practices and identities in the school space”. It aims to collect information about you and your use of digital technologies.

Collected information will be used for two purposes: 1) to select four participants from your class who meet certain criteria the questionnaire will reveal, and 2) to characterise your class regarding access and daily use of digital technologies.

The collected information will be used only for academic purposes. Your name will be used **ONLY** for the first purpose, that is, to identify yourself in case you would like to be a participant in the project. Any other use given to the information collected by this questionnaire, like presentations or publications, will be **ALWAYS** anonymous and confidential.

Thank you very much for your time,

Paulina Ruiz C.
Doctoral student in Education
University of Bristol
[email]

Instructions

Carefully read each question and instruction before answering

For each question, you must check the option(s) that best suit(s) your current situation.

There are no right nor wrong answers.

This questionnaire will not be marked.

I. ABOUT YOU

1. Name: _____

2. Gender:

Check only one box.

☐

Female

☐

Male

3. Age: _____ years old

4. In which *comuna* (district) do you live? _____

5. Name three things you like to do in your free time:

II. ABOUT YOUR ACCESS TO AND USE OF DIGITAL TECHNOLOGIES

5. Which of the following digital technologies do you have at home for personal use?

Check all the appropriate boxes.

☐

Computer

☐

Laptop

☐

Tablet (for instance, iPad)

☐

Mobile phone

☐

Other, Which one(s)? _____

6. Do you have Internet access at home?

Check only one box.

☐ Yes

☐ No

7. How often do you use a computer connected to the Internet in the following places?

Check only one box for EACH LOCATION.

	Every day (2 hours or more)	Every day (less than 2 hours)	3 or more days a week	1 or 2 days a week	Some days a month	Never
School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friends' home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (<i>cyber-café</i> , public library, other public place)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Do you have your own mobile phone capable of connecting to the Internet (smartphone)?

Check only one box.

☐ Yes

☐ No

9. How often do you go online (wi-fi, pay-as-you-go, contract) on your mobile phone?

Check only one box.

☐ Every day (2 hours or more)

☐ Every day (less than 2 hours)

☐ 3 or more days a week

☐ 1 or 2 days a week

☐ Some days a week

☐ Never

10. How often do you access the Internet (from any device) for the following activities?

Check only one box per EACH ACTIVITY

	Every day	Some days a week	Some days a month	Never
Chatting (for instance, WhatsApp)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participating on social media (Facebook, Twitter, Instagram, for example)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Playing video games	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doing homework	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Downloading movies, music, video games or software.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surfing the Internet for fun (watching videos, reading blogs or comics, for example)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sharing or uploading videos, photos, or audio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Editing videos, photos, or audio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

III. ABOUT YOUR INTEREST IN PARTICIPATING IN THE PROJECT

11. Would you like to participate in this Project?

Check only one box.

☐ Yes, I would like to

☐ No, thank you

12. In the space below, you can add any remarks or doubts you have regarding the project or your possible participation in it.

THANK YOU!

Appendix H: Interview guides

All interview guides used in this study are listed in table H.1. The interview guides presented here can be regarded as a “generic version”. This means that they include neither data coming from other methods (like specific events that changes across applications) nor personalised bits for direct participants. I left a description of the information that changed from interviewee to interviewee in square brackets. All interview guides were originally in Spanish and translated by the researcher.

Table H.1.: Interview guides used in this study

Location in this appendix	Type of interview guide	Phase of the study
H.1.	Initial interview with direct participants	Phase 1
H.2.	Instructions for collecting online dialogues and interview guide about online dialogues	Phase 1
H.3.	Group interview with direct and indirect participants	Phase 2
H.4.	Final interview with direct participants	Phase 2
H.5.	Interview with head teachers	Phase 1
H.6.	Interview with teachers	Phase 1 and Phase 2

H.1. Initial Interview with direct participants

Remember to say that I am very interested in her/his opinion. I hope to get a “fair” image of how she/he uses technologies and mobile phones daily. Her/his participation is important in that regard. No wrong or right answers.

About you

(To break the ice, start conversation)

I checked your answers in the questionnaire [Appendix G, question 5; add three things they like doing the most]. Can you tell me more about these things?

Any other things you enjoy doing on a daily basis?

The questionnaire also showed me that you... [add other things about interests, for example, that they have a videogame console... Which videogames do you like?]

(General things on the use of digital technologies..., if they do not mention this earlier)

Could you tell me a bit more about this? [Other questionnaire questions: for example, you say you use your computer daily? You wrote that you do not use your computer much at your friends' house? You said that you do a variety of things on the Internet...?]

(Ego network)

Now I will take out pieces of paper with your classmates' names written on them. This will make it easier for me to talk about your relationships with the class since I don't know all their names at the moment.

Who of these will you say are the closest to you? *(let them to organise papers)*

With which of these close ones do you school projects, homework? With which of them you have common interests?

Which of them do you have on Facebook or other social media? What about whatsapp groups?

(names, what put them together) (it could be that they are people involved that are not from the class; that is okay)

(If not mentioned) Who else –family or friends– who are not in your class- would you add in the group of closest people? What about them in social media?

Let's talk about your mobile phone and applications you have. In which do your friends and close ones become present?

What about communication through your phone in school with your closest friends? Whom with?

What do you talk about? Which application/website do you use with them?

How important is your mobile phone for you? What happens to you when you forget to bring it to school?

About school

How would you describe this school? Does it have spaces/instances for you to do things you are interested in?

How strict are your teachers? What would you say this school cares about the most? What are common reasons you and class are told off about?

What about the use of digital technologies in the school? [questionnaire, for example, in the questionnaire you wrote you barely use computers here. Asking about activities I've seen or heard about digital technologies]

(Mobile phone)

What about rules around the use of mobile phones in school? What are the rules? You and classmates are using it anyway, what about that?

Have you or your class been involved in any trouble related to the use of mobile phones here?

What about the use of mobile phones in classes, as part of a subject?

I see that in your class, everyone takes pictures while in the school [I can add examples] Where do those photos go? Are they shared, with whom, where?

About you in school

How would describe yourself in school? In which ways do your personal interests [use what she/he already mentioned] show up in school?

How would you describe your class? What role would you say you have in it?

The way you use technologies, we talked about earlier, does it appear in school? In which way?

How would you describe the use you give to your mobile phone in school? Is it different to the way you use it in other spaces?

H.2. Instructions and interview guide on online dialogues

Instructions to collect online dialogues

The following instructions are for you to collect **two online dialogues**. My aim is to understand more about your use of digital technologies and mobile phones. The purpose of asking you to do this is to draw attention to your opinions about technology use while respecting your privacy in online spaces.

I will ensure anonymity and confidentiality of any information given to me in any instance where this information could be used, namely data analysis or academic publications.

Thank you very much!

The idea is that you select two online dialogues where you have been involved in the three last weeks in an online space (Internet). This online space can be any platform or site on Internet (chat, application, posts, for example).

The dialogues can be between you and one other person or between you and several people. The important thing is that you are part of the dialogue.

The dialogues need to be available to be reviewed on a date we select together. However, I would appreciate it if you could send them to me before this date through Whatsapp or to my email [email]. The dialogues need to be in a digital format (screenshot, photo, word document, for example).

In terms of the length of the dialogues, each needs to have at least 8 interactions (8 utterances) in total, not per person). A reader who does not know anything about the dialogue should be able to understand what it is about and what the people involved are discussing. You can add notes or comments if you like to contextualise or explain something that is not self-explanatory. If the dialogues include file sharing (photos, audios, videos, or documents), I would appreciate it if you could add those as well, or at least describe what they are about.

You can change the names of the people involved in the dialogues if you like, but it is important to know which one you is, how many different people are involved and when each person is participating. If classmates are involved, it is important to know who they are, so we can ask for their permission to use the dialogues for academic purposes.

Do not select dialogues that can bother or offend those involved. It is crucial that you ask the people involved in the dialogues for permission and tell them what you will be doing

The following descriptions present the criteria to select each online dialogue. In each case, select dialogues you think are a good example of each category based on your opinion and experience.

DIALOGUE 1

Choose a dialogue that has taken place via your mobile phone (application, social media, or website). All or a part of it should have taken place while you were at school (classroom, schoolyard, and/or other space). The topic does not matter, and it does not need to involve classmates.

Example: a dialogue with a friend on WhatsApp or Messenger that started in the morning at home and then you resumed in one of the breaks at school.

You need to choose a dialogue that you consider a good example of daily online interaction you have at school with one or more people using your mobile phone.

DIALOGUE 2

Choose a dialogue about a relevant issue has taken place in your school or related to school where at least one classmate is involved. At least part of that dialogue should have been taken place using your mobile phone.

What a “relevant issue” means is up to you. It does not need to be controversial; for example, it could be something that has been under discussion for many days, or something that called your or your classmates’ attention. It must be an issue related to the school, such as classes, teachers, classmates, other classes, infrastructure, school activities, or school trips, just to name a few possibilities.

INTERVIEW ABOUT ONLINE DIALOGUES

<p><i>(Check for permission)</i></p> <p>How was the experience of choosing the dialogues? What was easy or difficult and why?</p> <p>First, tell me a little bit about your selection and what are they about?</p> <p><i>(The idea is to have a conversation instead of going through each question like a questionnaire)</i></p>
<p>For each dialogue <i>(make sure this info appears in the conversation)</i></p> <p>Why did you choose it? Why is it a good example?</p> <p>When and at what time did this dialogue take place? <i>(add approx. start and finish times)</i></p> <p>In which offline sites <i>(classroom, schoolyard, other, outside school, where?)</i>?</p> <p>In which online sites <i>(Facebook, Instagram, Whatsapp?)</i></p> <p>Device used <i>(phone and what else?)</i></p> <p>When selecting, did any other dialogue come to mind? Why? What is it about? Why did you not send/bring it? Is it better than the one selected? <i>(no need to send it).</i></p>
<p>Dialogue 1 – mobile phone in school</p> <p>What is this dialogue about? Who is involved?</p> <p>How often has this kind of dialogue and topic taken place for you?</p> <p>In which way is it a “typical” online conversation on the phone for you while being in school?</p> <p>In which other online platform does this kind of conversation take place (applications, websites)? In which way is it different in other spaces?</p>
<p>Dialogue 2 – about a relevant school-related topic</p> <p>Why is it relevant? In which regard for you?</p> <p>What other topics could you have chosen? Something that took place this year or last year?</p> <p>How often do you discuss topics like these and in this way? <i>(mobile phone, how does it spread online...)</i> In school?</p> <p>What would a typical conversation with friends be like? Different to this one?</p> <p>Something important that has taken place this year in the school and class?</p>
<p>Overall...</p> <p>Would you say the selected dialogues show how you use the Internet to relate to other people on a daily basis? Why? Other examples?</p> <p style="padding-left: 40px;">With your friends and classmates? Other people?</p> <p>Do these dialogues show how you use mobile phones daily, and how you use social media in school?</p> <p><i>(Explore if there are any differences between dialogues depending on where they occur (school), people involved, or online platform used).</i></p> <p><i>[Come back to the group of people they selected (not with the papers) as the closest one in the initial interview and see where they appear on the dialogues]</i></p>

H.3. Group interview with participants

There were two different group interview guides, one per school. The differences concerned the practices observed. Overall, the categories of digital practices I created were the same. The following is the generic version of the interview, including practices observed in both schools.

I will use the list of practices as prompts. I will ask them to classify the practices and talk about school rules, personal and collective identities, and connections with school and distinction in kind of practices.

Do not forget to mention that the list of practices is based on what I observed (most of them). / Most of the observed practices involved the use of phones. / The use of the masculine gender is just to protect people's identities.

General structure:

Break the ice.

1. Ask each of them to select the ones that represent their daily use of mobile phones in school. One by one, ask them why, let the addressed person talk and others intervene if it is a related topic.

2. Ask them to classify practices in any way they like (help with some of my own classifications if needed) During 1 and 2, introduce questions I have about the school, themselves, rules, teachers, etc. Address the main topics of my categories.

To start and break the ice:

How long have you been in this school?

How long have you been part of the same group of friends?

About mobile phones (could be also in between or at the end)

What does your mobile phone mean to you?

(Favourite applications?)

1. Practices that represent each of them

Which of these practices **represent your daily** mobile phone use in school?

Which one you do **the most** and which one do you **never do**?

What do you think when you see your selection?

Among all the observed practices, do you think there are other practices **missing?** (for yourself, for the class)

Inside and outside school:

Is this mobile phone use similar, the same, or different from the one you have out of school?

(Communication using mobile phones

Peers, others // Other technologies, social media, applications)

2. Ask students to classify these practices. All together <i>Questions are not in the order to be asked.</i> <i>If topics do not come up, I could start asking questions using the group of practices as a reference</i>	
Observed practices (<i>as reference or to point out</i>) [* Observed only in one school]	Categories / Questions
	Academic/ non-academic use <i>(probably main distinction. See if they use it, otherwise, ask for it).</i>
Take a picture of the whiteboard. Look for information on Internet to do homework at the last minute. Take a picture of classmate' worksheet to answer mine. Take a photo of a textbook page for a class activity because the student did not bring his book.* Record a classmate explaining a novel that you have not read.* Use projector for enlarging photos for decoration.* Putting 'all' the phones in a bag to take them to P.E.*	Ability to adjust, working around, improvising -For the class, school work -For themselves Teachers' reactions, rules. How do they differ? If you are caught, what do they do? Do you remember any instance when as group of friends or class you did something with the phone weren't supposed to? Did you agree to do something?
1.Look for information on the Internet for something class-related (<i>could be unauthorised as well</i>) 1. Use dictionary on the phone (<i>could be unauthorised as well</i>) 1. Use calculator on the phone (<i>could be unauthorised as well</i>) 1.Help the teacher to connect his/her laptop to the projector or help teacher with the data projector. 1.Use Power Point for presentations. 1. Classmate helps changing slides during presentations.* 1. Check photo on the phone for art class. * 2. Take a picture of a classmate's worksheet to answer mine. 2. Use phone to write, register things (<i>could be authorised as well</i>) 2. Chatting with a teacher while showing something to him on the phone. 2. Approach teacher while holding phone. 2.Look for information on the Internet to do homework at the last minute. 2. Receive call in the middle of classes. 2. Clean the phone in classes. 2. Charge phones in the classroom.	Mobile phone use in <u>classes</u>: 1. Authorised use 2. Unauthorised use , or not directly mentioned by the teacher. What do teachers do with this kind of use? What is authorised and what is not? Other uses? Can you think of something interesting, helpful that you did with your mobile phone for the class? What about contacting family members for an emergency [<i>for example, Alte school_ water was cut off one day</i>]? What do teachers do? Why don't they let the school contact your family?

<p>Communicate by phone from school with people outside</p> <p>Text classmate or friend</p> <p>Send photo, video, or audio messages to classmate or friend</p> <p>Phone call</p> <p>Communicate with classmates who did not come to school</p> <p>Contact relative to ask her to pick you up</p>	<p>Connecting with the outside world:</p> <p>Boyfriend/girlfriend, other friends?</p> <p>Between tutor groups?</p>
<p>Chatting in pairs or in a group around a photo, text, video, or other media (<i>Video games or games</i>)</p> <p>Share Internet connection with classmates (<i>or the phone device</i>)</p> <p>Take pictures (<i>record videos, pictures or videos of classmates, for example, sleeping</i>). (<i>selfies</i>)</p> <p>Use phone to look for guitar tab.*</p>	<p>Relationship with classmates</p> <p>Chatting around the mobile phone, phone-based content.</p> <p>What kind of things are you interested in sharing?</p> <p>What kind of topics are relevant?</p> <p>What about the class Whatsapp chat group?</p> <p>What kinds of topics are important to discuss?</p> <p>Other social media?</p> <p>[Examples of topics for each school]</p>
<p>Text classmate or friend</p> <p>Send photo, video, or audio messages to classmate or friend</p> <p>Take pictures</p> <p>Record videos</p> <p>Playing games on the phone</p> <p>Listen to music</p> <p>Look for information online</p> <p>Check incoming messages and/or social media</p> <p>Make phone calls</p>	<p>Common times to use phones</p> <p>Using your phone inside the classroom is different depending on the activity being done in classes? (teacher guiding versus in between classes, getting closer to the break, individual or group work, substitute teacher, different teachers, watching film/video).</p> <p><u>Importance of texting in classes?</u></p> <p><u>Why is it important to use the phone in classes?</u></p> <p>(reference – I observed that students may be chatting (offline) about something that started as text – parallel conversations)</p> <p>(I saw, though students passing pieces of paper to each other).</p> <p>(strategy for some teachers?)</p> <p>Difference between teachers?</p> <p><u>Different places inside the school</u></p> <p>Apart from the classroom, pitch, what other spaces are important?</p> <p>Hidden/ not hidden</p> <p><u>Group or individual activities</u></p>

OTHER Have the phone on the desk Take your phone everywhere Use phone as a mirror Check time on the phone	
Teachers' use of technologies <i>[Another set of practices]</i>	
Teacher uses Power Point in classes. Teacher gives a school project that incorporates the use of videos or computer (not in classes)* Teacher allows students to bring laptop/tablets to a couple of classes. *	What do you think of this?
Teacher takes somebody's phone away in classes.	What are the most common reasons for this? Differences among teachers?
Teacher asking students to put their phones away.	Differences among teachers?
Teacher checking his/her own mobile phone in classes.	Differences among teachers What kinds of activities are you doing? What do you think of this?

Other questions to ask in between or at the end

How strict is this school?

What are the main reasons your class can be told off?

What do you think of the fact that mobile phones are [forbidden-Vite school; not totally forbidden-Alte school]?

Do you think that mobile phone use hinders class activities?

Do you remember any problems related to the use of mobile phones in your tutor group or group of friends?

Do you think you have the ability to know where and how to use your phones?

When do you think it should be permitted? When is it permitted (implicitly)?

What about the computer lab in your school?

H.4. Final interview with direct participants

[Ask anything pending or that needs clarification from previous data collection methods that is not part of the next sections.]

Your school and you

Some of the things I will ask may sound repetitive, but I would like to connect your answers now with the whole journey we went through.

What is school for you? What is it for you to come to school? Are you motivated to come?

Is it important for you to follow the rules in here?

What do you think of the rules in the school?

[Handed a piece of paper to the direct participant with a list of personal traits and sometimes hobbies I think describe her/him based on our time together. For example: Committed, critical, respectful, friendly...]

What do you think of this list?

Would you change or add anything that is in there?

How would describe being like this in school? easy, complicated?

[Specific questions for each participant, connecting with mobile phone use if necessary, but not too much.]

Do you see a difference in the way you are in school and out-of-school?

[handed or read quotes from previous interviews –initial, dialogues, or groups– that can work as prompts in answering this]

How do your classmates see you? Have they expressed anything?

Within your group of friends, what role do you play? Are you similar, different to them? (in general, phone use?) In which way?

How do you think your teachers see you, think of you? Have they expressed anything?

Are you happy with the way you are at school? In the class? The way you are able to move around, interact with others?

Is there anything would you like to be different for you?

Digital practices and you

[Handed a piece of paper with a list of the digital practices the direct participant selected for him/herself in the group interview]

This is what you mentioned/selected the other day in the group interview... I made a selection...

[Handed a shorter list of the 2-5 I believe are more representative. Could combine other practices observed or retrieved from interviews]

What do you think of this selection?

Would you change or add anything? [Let them say, sometimes I had one-two other options to propose]

Would you say this is a good image of how you are in the school with your mobile phone?

[From now on, questions varied depending on each direct participant. I could add quotes from previous interviews or observed events that support why I want to know a bit more. **Example of questions/topics:**]

This list says a lot about your individual mobile phone use, what about your collective use? [or the other way around] [Or asking about hobbies mentioned by them but not so much observed in the school]

How do you combine your online interactions with offline interactions with friends? At school, out-of-school, free time?

Do you keep in touch with your mum/siblings quite regularly... Why is this important for you?

Do you think mobile phones play an important role in the way you act here in school?

You are told off a lot/you are not told off because of your mobile phone use, why do think that is?

I see some tension between X and Y, what do think about this? Do you agree?

Do you use your mobile phone differently in the school and out-of-school? In which way? Why?

How was the experience of participating in this project?

(Do not forget to thank them)

(I handed a little present to each direct participant).

H.5. Interview with head teachers

<i>(Breaking the ice)</i> When did you start working in this school? As a head teacher?
When was this school opened? How would you describe this school?*** Important things the school has focused on in the last couple of years?
How would you describe your students? [may add things listened or observed] *** How does the school take care of students' personal needs or heterogeneity, hobbies..? What about the school climate? In terms of regulations, what key elements are important for the school to preserve or ensure?*** [I could ask about something included in the school documents, such as rules or descriptions of the school]
Regarding the use of technologies in the school, how would you describe it?*** What about the computer lab?*** [Add information about this in the school documents]*** Regarding the use of mobile phones in the school, the school regulation documents say [add quote], is this enforced and how?*** [Depending on the school, I would focus on how these issues have been sorted out, how this approach has worked for students and teachers]*** What is your opinion about the curricular use of mobile phones? What do the teachers think about this? *** Anything else would you like to add?***
***questions considered in the ICT coordinator's interview guide used only in Vite school.

H.6. Interview with teachers

<p><i>(Breaking the ice)</i> How long have you worked in this school? How long have you been teaching [in general and selected class]?</p>
<p>Regarding the [selected class], how would you describe this group? How are the students?</p> <p>What do you think about today's youth? As a teacher, what is to work with this generation? (youth / any problems, concerns, or good things) <i>(Connect with their description of the selected group)</i></p>
<p>School</p> <p>How would you describe this school? What kind of students attend this school?</p> <p>In terms of regulations, what key elements are important for the school to preserve or ensure?</p>
<p>Mobile phones</p> <p>Regarding the use of mobile phones in the school, the school regulation documents say [add quote], is this enforced and how?</p> <p>What is your opinion on the students' use of mobile phones in the [select class]? In other classes?</p> <p>What is your opinion about the presence of mobile phones in classes? Their use in classes?</p> <p>When do you think are good moments in your class to use it? Or when it is not a problem for you?</p> <p>Do you use it in your classes? Do you plan to use them or is it something that happens without planning? Do you remember any experiences with the [selected class]? With another class?</p> <p>When is the presence of mobile phones in your classes not beneficial? What is the limit? When students or you are doing what?</p> <p>In the school, between teachers, has this topic been discussed? What are your main concerns? [Ask depending on the school about official regulations and what takes place in practice]</p> <p>Has it been discussed with students?</p>
<p>Other technologies</p> <p>Do you incorporate technologies in your classes? If so, how?</p> <p>[Ask about something observed or heard about this issue relevant for this teacher]</p> <p>What about the computer lab in this school and its technological equipment? Do you use it? Why? Why not?</p>

Appendix I: Observations – examples of fieldnotes and grids

I.1. Converting raw fieldnotes to a digital format

Fieldnotes - original format: hand written in a notepad using a 4-colour pen. When transferred onto a digital format, some changes were made (e.g. amend typos; add words in incomplete sentences; complete/improve colour distinctions).

Direct participants are referred to by their pseudonyms and indirect participants by their initials. Teachers were referred to by the initial of their first name.

Language class, Day 8 of observation, Alte school (15.50 – 17.20 pm) (Excerpt)

Location: one of the school yards (special situation)

People involved in the observation: Antonia and her friends (IM and IL); Agustina and her friends (Y, P, and B). Each group of friends is working on a worksheet (one per group). Direct participants are referred to by their pseudonyms and indirect participants by their initials.

Researcher's location: seated more or less in front of both groups on some stairs.

Legend:

-References to or use of mobile phones in bold;

-Things related to direct participants in red;

-And researcher's personal notes or reflections in green.

[I arrived at 16.00 approx.; teacher talked to me for a while; then I joined Agustina and Antonia]

(...)

16.20 approx.

Agustina is working on the worksheet. When I arrived, she had her mobile phone out and she was talking with her friends. I listen to them talking about a friend, whom they talk to earlier on the phone. Y and P are taking selfies with their phones. Now they are all checking together one of their phones, some of them say: answer her! Answer her! Antonia's group are listening to music. IM and IL are working on the worksheet while Antonia is checking her phone all the time.

16.37 Agustina's group is talking to somebody on one of their phones. [I wonder if they are talking on the phone with C who didn't come to school today or with MI, who left earlier in the day. I think the voice I am hearing is C's] It is not a phone call, but an audio message.

16.40 Teacher P shows up. Everybody hides their mobile phones. The teacher wants to know how they are doing. Once he leaves, they send another audio message to C [now I know is her]. They [Agustina's group] ask C about some things she bought earlier. B asks C to send a picture of her. B says: "She must look pretty".

While doing this, they are also working on the worksheet. They communicate with C and read and fill out the worksheet (helping each other). [self-regulation?]

16.42 They stop talking to C.

B reads aloud part of the instructions of the worksheet and answers to her group [Agustina's]

IL (from Antonia's group) moves to Agustina's group. She is checking the answers; comparing, but also copying some answers.

Just before this, Antonia's group was just chatting and laughing among them.

16.46 Agustina's group are again talking to C. Now it is a speakerphone call. They look as though they are checking the screen of one of their phones, but they are using the mic. One is holding the phone, with the mic towards everybody [I have a drawing of this in my notepad].

16.50 Both groups now are checking their answers together. In Antonia's group, mainly IL answered the worksheet. All the girls are together, except for Antonia, who is in her original location, checking her phone.

16.51 All girls (minus Antonia) are talking again using one phone. It seems that they are talking to C again, very quietly.

Now I listened... It seems that C went to a concert with some friends. She is queuing for a Rihanna concert.

Antonia asks (she has not moved): Who with? She listened the conversation next to her while checking her phone.

Some girls answer: "R...." They ask Antonia if she wants to see a picture of R.... She accepts and joins the rest of the girls.

[IL has a good relationship with P] Everyone is talking to everyone.

IM is mocking Antonia...

(...)

[Class ended at 17.10]

I.2. First and main observational grid

DAY / FOCUS	Day 8, Vite school. Second day with direct participant Agustina				
SUBJECT / BREAKS	LANGUAGE				
CONTEXT	<p>15.50</p> <p>The bell rings. I am talking to one of the Physical Education teachers in the school yard.</p> <p>I say to the teacher I have to leave to Language class. She says that she just saw the class going to the music yard and saw the language teacher going the other side. I then look for the class group and find them in the music yard.</p>	<p>16.20 approx.</p> <p>After talking to the teacher, I get closer to where Agustina is. I sit in some stairs between Agustina's and Antonia's groups.</p> <p>It is Antonia + IL + IM Agustina + B + Y + P.</p>			
MOMENTS OF THE CLASS / BREAK	<p>16.00 approx.</p> <p>I am getting close to the students, who are working in groups scattered in different parts of the music yard. I bumped into the language teacher. He starts talking to me and says that he is tired. He hands me the worksheet students are working on today. He says that students leave school late and they are also tired. It is important –he says– to keep them engaged. That is why he takes them sometimes to work outside the classroom, like today. He adds that students are busy, many of them get home late and tired to sleep at home.</p> <p>He says: "that is why it is important to study social media /use/" They do not have time to meet face-to-face.</p>		<p>16.40 approx.</p> <p>Teacher P shows up. Everybody hides their mobile phones. The teacher wants to know how they are doing.</p>	<p>16.50</p> <p>Both groups now are checking their answers together. In Antonia's group, mainly IL answered the worksheet.</p> <p>All the girls are together, except Antonia, who is in her original location, checking her phone.</p>	<p>17.10</p> <p>The while class comes back to the classroom. On the way there, B asked me until when I will be in the school. She also wants to know if I will be adding and extra direct participant.</p> <p>Once in the classroom, is 17.13, teacher starts revising the worksheet's answers. There is only time for part 1 of the worksheet.</p>
CLASS AS A WHOLE / OTHER STUDENTS					
CLASS / OTHER STUDENTS WITH TECHNOLOGIES					
Agustina		<p>Agustina is working on the worksheet now. When I arrived, she had her mobile phone out and she was talking with her friends. I listen to them talking about a friend, whom they talked</p>	<p>16.40 Teacher P shows up. Everybody hides their mobile phones. The teacher wants to know how they are doing.</p> <p>Once he leaves, they send another audio message to C [now I know is her]. They [Agustina's group] ask C</p>	<p>16.50 Both groups now are checking their answers together. In Antonia's group, mainly IL answered the worksheet. All the girls are together, except for Antonia, who is her original location, checking her phone.</p>	

		<p>to earlier on the phone. Y and P are taking selfies with their phones. Now they are all checking together one of their phones, some of them say: answer her! Answer her!</p> <p>16.37 Agustina's group is talking to somebody on one of their phones. [I wonder if they are talking on the phone with C who didn't come to school today or with MI, who left earlier in the day. I think the voice I am hearing is C's] It is not a phone call, but an audio message.</p>	<p>about some things she bought earlier. B asks C to send a picture of her. B says: "She must look pretty". While doing this, they combine working on the worksheet. They communicate with C and read and fill the worksheet (helping each other). [self-regulation?]</p> <p>16.42 They stop talking to C. B reads aloud part of the instructions of the worksheet and answers to her group [Agustina's]</p> <p>IL (from Antonia's group) moves to Agustina's group. She is checking on the answers; comparing, but also copying some answers.</p> <p>Just before this, Antonia's group was just chatting and laughing among them.</p> <p>16.46 Agustina's group are again talking to C. Now it is a speakerphone call. They look as they are checking the screen of one of their phones, but they are using the mic. One is holding the phone, with the mic towards everybody [I have a drawing of this in my notepad].</p>	<p>16.51 All girls (minus Antonia) are talking again using one phone. It seems that they are talking to C again, very quietly.</p> <p>Now I listened... It seems that C went to a concert with some friends. She is queuing for a Rihanna concert.</p> <p>Antonia asks (she has not moved): Who with? She listened the conversation next to her while checking her phone.</p> <p>Some girls answer: "R...." They ask Antonia if she wants to see a picture of R.... She accepts and joins the rest of the girls.</p> <p>[IL has a good relationship with P] Everyone is talking to everyone.</p> <p>IM is mocking Antonia... IM is mocking Antonia saying something about she been jealous [I can tell it is part of her style, been sarcastic] "we all hate Antonia".</p> <p>Antonia, checking her phone is grinning. You can tell is a joke.</p> <p>16.55 they talk about phone cases. They compare they cases among them.</p> <p>Agustina has been a bit quiet this time, more involved with the worksheet.</p> <p>17.00 Everyone has finished their worksheet.</p> <p>Agustina took her phone and start showing pictures to her friends.</p> <p>Agustina, B, IF and Antonia check something on IL's phone. They are watching a video (I can hear it).</p> <p>Agustina checks her phone once in a while.</p>	
Vicho					
Mario					
Antonia		<p>Antonia's group are listening to music. IM and IL are working on the worksheet while Antonia is checking her phone all the time.</p>	<p>READ AGUSTINA → CONNECTED.</p>	<p>READ AGUSTINA → CONNECTED</p>	
OTHER (events, activities)					

I.3. Second grid – Students and teachers relationship

Day - session	Short description of class	Use of mobile phone - purpose	Context	Individual, pair or group	Teacher appearance
Day 8 – Language	Teacher takes students to go to the 'music yard' to work in groups on a worksheet. [I sat next to Antonia's and Agustina's group of friends]	Agustina is working on the worksheet, while in between talking with her friends (Y, P, B). They are checking one of their mobile phones, texting, recording and listening to audio messages. I can hear C's voice in one of the incoming audio messages.	Students are spread out in the music yard working on the worksheet. The teacher is walking by the group, checking their progress.	G	-
		Antonia, IM, and IL are seated next to Agustina's group of friends, working in their worksheet. They are listening to music from one of their phones. In fact, both IM and IL are working on the worksheet. Antonia is just talking and checking and texting on her phone.	Students are spread out in the music yard working on the worksheet. The teacher is walking by the group, checking their progress.	I-G	-
		Teacher F shows up and everyone hides their phones.	Teacher F shows up to know about their progress.	G	Teacher shows up. He doesn't tell them off about their phones.
		Once the teacher left, Agustina's group they go back to what they were doing. They start talking to C again, who is in a queue waiting to see a gig. They ask her to send a picture of her. While taking to C, they do some work on the worksheet. Antonia is still absorbed in her phone, while IM is working on the worksheet.	Students are spread out in the music yard working on the worksheet. The teacher is walking by the group, checking their progress.	I-G	-
		While doing this, they combine working on the worksheet. They communicate with C and read and fill the worksheet (helping each other). IL (from Antonia's group) moves to Agustina's group and check answers. Agustina's group talks to C. again. IM also moves to Agustina's group. Antonia is alone in the same spot. They finish completing the worksheets. They spend the rest of the class talking to each other, while using their phones.	Students are spread out in the music yard working on the worksheet. The teacher is walking by the group, checking their progress.	I-G	-

I.4. Ethnographic portrait

During data analysis, I selected this event/class as a good example of the interconnection between school work and peer relationships mediated by their mobile phones (Chapter 6, section 6.3.3.). Sections on Antonia were also used in the generation of the individual case of Antonia (Chapter 7, section 7.2.2.). In this version, I added some elements I remembered and deleted others to make the event clearer and easier to follow. In brackets [] there are bits that were not included in the version used in the dissertation (section 6.3.3.).

Language class, school yard, Day 8, Alte school

[Agustina and her friends (Y, P, and B) are seated next to Antonia and her friends (IM & IL)]

Agustina is working on the worksheet, while in between talking with her friends. They are checking one of their mobile phones, texting, recording and listening to audio messages. The voice from the incoming audios is C's, who didn't come to school today.

Antonia, IM and IL are sitting next to Agustina's group of friends. They are listening to music from one of their mobile phones. IM and IL are working on the worksheet. Antonia is engaging talking to them, but not working. She is checking and texting on her phone.

The teacher shows up and everyone hides their phones.

Once the teacher left, Agustina's group go back to what they were doing. They start talking to C again, who is queuing for a gig, via audio messages. They ask her to send them a picture of her.] While talking to C, they do some work on the worksheet. They stop talking to C. B reads aloud some instructions from the worksheet and their answers to her group. IL – from Antonia's group- moves to Agustina's group. She takes notes, comparing their responses and copying some answers.

IM and Antonia are still next to the other group chatting. The rest of the girls call C and turn on the speakers for everyone near to hear. IM moves to the other group.

Then, both groups are checking their answers together, except from Antonia, who is still in her original location, checking her phone.

The rest of the girls call C again. Antonia asks who they are talking to, and the girls offer her to see a picture. Antonia joins them. Both groups are now talking about the same things.

They finish completing the worksheets. They spend the rest of the class talking to each other, while using their phones.

Appendix J: Protocol for transcriptions and translation of interviews

Table J.1. shows the transcription protocol that was used when transferring the interviews from an audio format to a written (digital) format. This was done in Spanish.

Table J.1.: Transcription protocol of interviews

Bold= INTERVIEWER

Not-bold = INTERVIEWEE (individual or group interview)

... = hesitation, thinking, short pause between words.

[] = details on the tone of the voice used, movements, actions; comments on the context; clarifications.

[Didn't understand] = audio is not clear.

[00:00:00] = track of the time in the audio.

“ ” = indirect speech - when the person talking is quoting something he/she or somebody else said.

Direct participants were referred to by their pseudonyms and indirect participants by their initials. Teachers were referred to by the initial of their first name.

In group interviews, when 2 or more participants talk at the same time instead of initial or pseudonyms, TJ (*todos juntos*, everybody) was added.

In group interviews, when it was not possible to identify who is talking, NN was added instead. If the gender is identifiable an m (*mujer*, woman) or h (*hombre*, man) was added next to NN.

Table J.2. presents the translation protocol that was used for selected quotes from the interviews that were added in the dissertation.

Table J.2.: Translation protocol for selected quotes.

Bold= INTERVIEWER

Not-bold = INTERVIEWEE (individual or group interview)

... = hesitation, thinking, short pause between words.

[] = as in the transcriptions, these brackets are used when comments on the context or clarifications are needed.

“ ” = indirect speech - when the person talking is quoting something he/she or somebody else said.

Italics = used for words or expressions in Spanish where the translation does not fully convey the idea. In () there is the closest English translation or short explanation.

(...) = here means that a part of the transcription (or observational notes) is missing in order to send a more straightforward message.

[?] = not sure of what was said.

/ / = A word or sentence omitted in the Spanish version that was needed to be added to make sense of the translated version.

Direct participants are referred to by their pseudonyms and indirect participants by their initials. Teachers were referred to by the initial of their first name.

REGARDING STUDENTS PARTICIPATING IN GROUP INTERVIEWS

When participants are not direct participants:

W# and M# = Initials for indirect participants involved in the interview (from transcription) were changed to W (woman) and M (man) where applicable. A number was added as well to identify each of them (for example: w1, w2, m1, w2, w1...). The number are assigned only for the selected quote, thus, w1 is not identifying a specific person among selected classes.

Ev = When 2 or more participants talk at the same time instead of w# or m#, Ev (everybody) was added.

NN = When is not possible to identify who is talking, NN was added instead. When possible, a w or m was added to indicate gender.

Appendix K: Interview coding

Table K.1. shows the complete and final list of interview codes generated in Nvivo for this study.

Table K.1.: Complete list of Nvivo codes

<p>Name</p> <ul style="list-style-type: none"> CITAS PARA METODOLOGIA Y ETICA DIALOGOS ONLINE ENTREVISTAS DIRECTORES Y PROFESORES <ul style="list-style-type: none"> Colegio <ul style="list-style-type: none"> Alumnos Sello colegio, reglamento, cultura escolar Curso II medio Digital - uso responsable, colegio, momentos complejos Relación entre juventud y colegio - percepción Uso curricular de tecnologías Uso del celular <ul style="list-style-type: none"> Apoderados y relación con uso de celular Estudiantes, reglas, percepciones Profesores - no curricular Profesores - uso curricular 	<p><u>QUOTES FOR METHODOLOGY AND ETHICS</u></p> <p><u>ONLINE DIALOGUES</u></p> <p><u>INTERVIEW WITH HEAD TEACHERS AND TEACHERS</u></p> <p>School Students School signature, regulations, school culture</p> <p>Year-11 class Digital – responsible use, school, complex moments Relation between youth and school – perception Curricular use of technologies Mobile phone use Parents and relationship with phone Students, regulations, perceptions Teachers – no curricular Teachers - curricular</p>
<ul style="list-style-type: none"> ENTREVISTAS PARTICIPANTES ALTE <ul style="list-style-type: none"> ALT EVENTOS <ul style="list-style-type: none"> Alianzas Chat de whatsapp del curso 'Confesiones' en Instagram Corte de agua Curso Orientación - uso responsable de redes sociales Escuchar musica en el colegio Juampajuampito Pelea online en clase de dos compañeras del curso Preparación del 18 Retiros del colegio Tarea de dividir papelitos de practicas en entrevista grupal Trabajo de arte - obra de teatro Trabajo de lenguaje - memes Uso de cel por PROFES COLEGIO Y CURSO <ul style="list-style-type: none"> Colegio Colegio - uso y reglas sobre tecnologia o celulares Curso Ent grupales - part. indirectos - uso personal de cel Ent grupales - relación con profes Ent grupales - uso de celular desde colegio Ent grupales - uso del cel en el colegio Ent grupales - uso del cel en general 	<p><u>INTERVIEWS WITH ALTE PARTICIPANTS</u></p> <p>ALTE EVENTS <i>Alianzas</i> (School Anniversary) Class whatsapp chat group "Confessions" Instagram group Water supply cut Orientation class – responsible use of social media Listening to music in school <i>Juampajuampito</i> Online <i>fight</i> between two classmates "18" Preparation (National Celebrations) Leaving school earlier Tasks of dividing papers in group interview Art project – play Language project – memes Teachers' phone use</p> <p>SCHOOL AND CLASS School School - use and regulations on technologies and phones Class Group interviews (GI) – indirect participants – personal phone use GI – relationship with teachers GI – phone use from the school GI - phone use in the school GI – general use of phone</p>

<ul style="list-style-type: none"> DP - Cómo es cada participante DP - Cómo estudian, hacen tareas y trabajos escolares DP - Historia personal y tenencia de tic DP - Hobbies y rutinas DP - Relación con y opinión de profesores + cel DP - Relaciones de amistad y con compañeros del curso DP - Uso de redes sociales o tic con sus amigxs DP - Uso de redes sociales, tecnologías general DP - Uso de tecnologías con familia y apoderados DP - Uso de tic y celular en el colegio 	<p>DP (direct participant)- how the participant is DP - how do they study, homework, and school activities DP – personal history and ICT ownership DP – hobbies and routines DP – relationship with and opinions of teacher + phone DP – relationship with friends and classmates DP – social media and ICT use with friends DP – ICT and social media use in general DP – ICT use with family and guardians DP – ICT and phone use in the school</p>
<ul style="list-style-type: none"> Z - AGUSTINA <ul style="list-style-type: none"> Amigas del cole Líder, mediadora Mirada crítica sobre el colegio Poco uso de cel en el colegio Su gusto por series y música en español Z - ANTONIA <ul style="list-style-type: none"> Amistad online and offline Cheerleader Intenso uso de celular Mirada crítica frente al colegio Participación e interés político Riesgos en su uso de redes sociales Z - MARIO <ul style="list-style-type: none"> Conocido en el colegio Deporte - aire libre Escurridizo, travieso, a escondidas en el cole Producción de medios y videos Su relación con el colegio participación y entretenimiento Z - VICO <ul style="list-style-type: none"> Celular, diversión y grupo de amigos Lado artístico y otros gustos Sin Internet en el cel Su relación con el mundo escolar 	<p>(The 'Z' in Nvivo was to move individual codes to the bottom of the list)</p> <p>AGUSTINA School Friends Leader, mediator Critical view on school Low use of phone in school Her liking of series and music in Spanish</p> <p>ANTONIA Online and offline friendship Cheerleader Intense use of phone Critical view on school Political interest and participation Risks involved in her social media use</p> <p>MARIO Known in school Sport – outdoors Elusive/restless, naughty, hiding in the school Media and video production His relationship with school, participation, leisure</p> <p>VICO Phone, leisure and group of friends Artistic side and other interests Without Internet on his phone His relationship with the school world</p>
<ul style="list-style-type: none"> ENTREVISTAS PARTICIPANTES VITE <ul style="list-style-type: none"> COLEGIO Y CURSO <ul style="list-style-type: none"> Colegio Colegio - uso y reglas de tecnología o celulares Curso Ent grupales - part. indirectos- uso personal de cel Ent grupales - relación con profes Ent grupales - uso de celular desde colegio Ent grupales - uso del cel en el colegio Ent grupales - uso del cel en general 	<p><u>INTERVIEWS WITH VITE PARTICIPANTS</u></p> <p>SCHOOL AND CLASS School School - use and regulations on technologies and phones Class Group interview (GI) – indirect participants – personal phone use GI – relationship with teachers GI – phone use from the school GI - phone use in the school GI – general use of phone</p>

<ul style="list-style-type: none"> DP - Cómo es cada participante DP - Cómo estudian, hacen tareas y trabajos escolares DP - Historia personal y tenencia de tic DP - Hobbies y rutinas DP - Relación con y opinión de profesores + cel DP - Relaciones de amistad y con compañeros del curso DP - Uso de redes sociales o tic con sus amigos DP - Uso de redes sociales, tecnologías en general DP - Uso de tecnologías con familia y apoderados DP - Uso de tic y celular en el colegio EVENTOS VITE <ul style="list-style-type: none"> Chat de whatsapp del curso Corte de luz de enchufes Día en que les prohibieron llevar cel a educación física Email del curso Escuchar música en el colegio Inasistencias y atrasos y retiros Preparación del 18 Tarea de dividir los papelitos de prácticas en entrevista grupal Tema de ausencia de libros de estudio Trabajo de investigación de biología Trabajo lenguaje - crítica de cine Trabajo lenguaje - videodeclamaciones Uso de cel por PROFES 	<p>DP (direct participant)- how the participant is DP - how do they study, homework and school activities DP – personal history and ICT ownership DP – hobbies and routines DP – relationship with and opinions of teacher + phone DP – relationship with friends and classmates DP – social media and ICT use with friends DP – ICT and social media use in general DP – ICT use with family and guardians DP – ICT and phone use in the school</p> <p>VITE EVENTS Class whatsapp chat group Electricity cut off The day that phones were banned from physical education class Class email Listening to music in the school Absence, being late, or being picked up “18” preparation (National Celebrations) Tasks of dividing papers in group interview Issue about not bringing textbooks for class School research project in Biology Language project – film review Language project – video recitation Teachers’ phone use</p>
<ul style="list-style-type: none"> Z - ALFREDO <ul style="list-style-type: none"> Cambios entre antes y después de ausencia del colegio Desgano de ir al colegio - desconexión Grupo de amigos Ira la universidad - estudio - curso de verano de la U.Chile Z - CONSTANZA <ul style="list-style-type: none"> Grupo de amigas Hobbies - fangirl Liderazgo - participativa - comprensiva 'Mala alumna' Scout Z - ROSA-MARIA <ul style="list-style-type: none"> Autopercepción Buena alumna Grabación de su resumen en Inglés Grupo de amigas - intereses Hobbies - fangirl Interacción con gente fuera del cole - tecnologías Z - SIMONA <ul style="list-style-type: none"> Bajo uso de celular en el colegio Cambio de grupo de amigas Juega juegos Relación con su mamá Tesorerera del curso Timidez, preocupada de cumplir MEMORABLE QUOTES 	<p>(The 'Z' was to move individual codes to the bottom) ALFREDO Changes between before and after his school absence Apathy in attending school – disconnection Group of friends Going to Uni – studies – summer course in University of Chile</p> <p>CONSTANZA Group of friends Hobbies – fangirl Leadership – participative – understanding “Bad student” Scout</p> <p>ROSA-MARIA Good student Self-perception Recording of her summary in English [class] Group of friends – interests Hobbies – fangirl Interaction with people outside school - technologies</p> <p>SIMONA Low use of phone in the school Change in her group of friends Playing [video] games Relationship with her mum Class treasurer Shy, worried to fulfill her duties</p> <p>MEMORABLE QUOTES</p>

Figures K.1., K.2. and K.3. show examples of internal coding done to selected Nivo codes.

Figure K.1.: Excerpt of internal coding. Code: “**INTERVIEWS WITH VITE PARTICIPANTS / SCHOOL AND CLASS /** Group int.– phone use in school”. Source: Group interview, girls, Vite school.

<p>St: en inglés.</p> <p>Reference 17 - 0.95% Coverage</p> <p>St: "ayudar a profesor a instalar su notebook al data".</p> <p>Am: sí</p> <p>P: esto en matemáticas [lo que viene]</p> <p>St: "usar el celular como calculadora"</p> <p>NNm: pero no en las pruebas.</p> <p>St: no está permitido. Y tampoco en matemáticas.</p> <p>NNm: en física...</p> <p>Sck: nos dejan en todo, mientras no sea una prueba [hablan todas juntas, difícil cachar a cada una].</p> <p>¿No en las pruebas?</p> <p>Sck: no en las pruebas.</p> <p>Pero se puede sacar pa' calcular cosas</p> <p>TJ: sí</p> <p>Sck: y en física, dependiendo del ánimo del profe.</p> <p>P: no, en física no.</p> <p>Sck: depende del ánimo del profe.</p> <p>St: en física nunca.</p> <p>Am: a mí sí me han dejado.</p> <p>Sck: a mí también.</p> <p>Reference 18 - 0.41% Coverage</p> <p>St: "escuchar canción en el celular como guía para tocar canción de música"</p> <p>TJ: sí</p> <p>NNm: sí, se puede.</p> <p>St: "mantener informados a los compañeros que no van a clases por el celular".</p> <p>Sck: a veces</p> <p>P: está permitido, pero en la clase, la clase, la clase no.</p> <p>NN: sí</p> <p>Reference 19 - 0.62% Coverage</p> <p>¿Qué más queda?</p>	<p>Calculator Educational [phone use]</p> <p>[phone use] Depends on the teacher. Mood [teacher's]</p> <p>Personal communication [with the phone]</p>
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Figure K.2.: Excerpt of internal coding. Code: **“INTERVIEWS WITH ALTE PARTICIPANTS / SCHOOL AND CLASS / School - use and regulations on technologies and phones”**. Source: Initial interview, Agustina, Alte school.

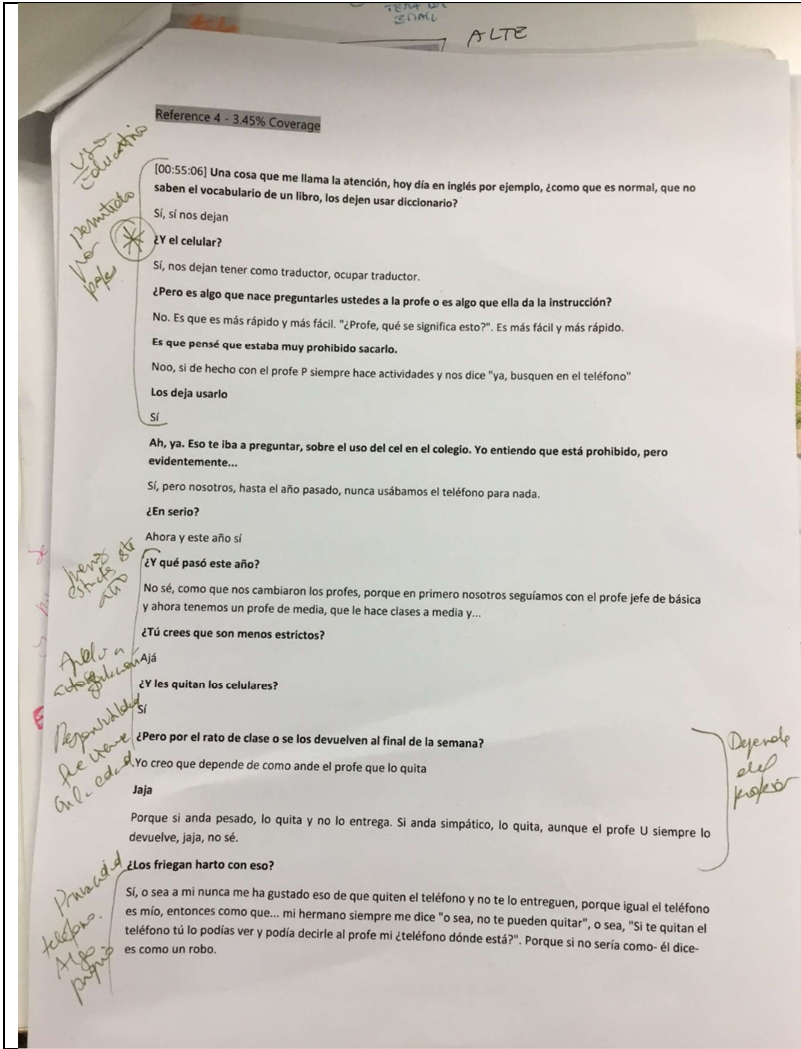
	<p><u>Educational use [of the phone]</u></p> <p><u>Allowed by teachers</u></p> <p><u>Less strict this year [phone regulations]</u></p> <p><u>Suggest self-regulation</u></p> <p><u>Responsibility that comes with age</u></p> <p><u>[phone use] Depends on teachers</u></p> <p><u>Privacy</u></p> <p><u>Phone</u></p> <p><u>Something personal</u></p>
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Figure K.3.: Excerpt of internal coding. Code: “INTERVIEW WITH HEAD TEACHERS AND TEACHERS / Mobile phone use / Students, regulations, perceptions”. Source: Language teacher, Alte school

<p><i>Este código debería tener por los de un capítulo ??</i></p> <p>Name: Estudiantes, reglas, percepciones</p> <p><Internal> Alt staff profesor jefe Language - § 3 references coded [5.60% Coverage]</p> <p>Reference 1 - 1.80% Coverage</p> <p><i>okuf</i> <i>100%</i></p> <p>Quiero pasar al tema del uso del celular en el colegio. Por lo que estoy leyendo en el reglamento en media se deja usar siempre y cuando el profesor lo autorice, ¿Qué te parece esa medida y si se cumple o no a la larga?</p> <p>Generalmente se cumple y los chiquillos son respetuosos del uso del celular. Creo que es una buena medida porque el celular se puede transformar en un elemento distractor.</p> <p>¿Y eso siempre ha sido así?</p> <p>Desde este año comenzó y se incluyó en el reglamento.</p> <p>¿Y cómo surgió esa discusión, si me puedes contar un poco?</p> <p>Fue una decisión que tomó la dirección</p> <p>Reference 2 - 1.42% Coverage</p> <p>¿Pero fue planteada por los profesores?</p> <p><i>regul</i> <i>como</i> <i>solu</i></p> <p>No, antes el celular era un elemento más de distracción como podría haber sido en nuestros tiempos el tetrís, algo que estuviera prohibido en la sala</p> <p>Me he dado cuenta de los papeletos en la sala, nadie intercambia papeletos en la sala</p> <p>Entonces se vio que era un elemento que estaba causando muchos problemas y que fue incluido en el reglamento</p> <p>¿Pero fue una petición de los profesores?</p> <p>Directamente, que yo sepa no</p> <p>Reference 3 - 2.37% Coverage</p> <p><i>proced</i> <i>clar</i></p> <p>Si porque en el fondo es que está todavía como escondido porque se está usando como un recurso pedagógico.</p> <p>¿Y dónde está el límite, dónde no puede estar en tú clase?</p> <p>Chiquillos whatsapeando, para copia en pruebas, para estar molestando a un compañero, ahí está el límite,</p> <p>¿Y qué haces tú cuando pasan esas cosas?</p> <p>Se le retira, se envuelve en un papel, se indica su nombre, se apaga el celular antes, jamás revisar el celular, se entrega en recepción y lo tiene que venir a retirar el apoderado, al final de la jornada</p> <p>¿Y te ha pasado en el 2º A?</p>	<p>Official regulations [how they were developed]</p> <p>Regulation as solution</p> <p>Clear procedure [to deal with phones]</p>
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Figures K.4. and K.5. show examples of interview memoing that went together with internal coding for Alte and Vite school.

Figure K.4.: Excerpt of memoing from code “Students, regulations and perceptions”, teachers’ interviews, Vite school.

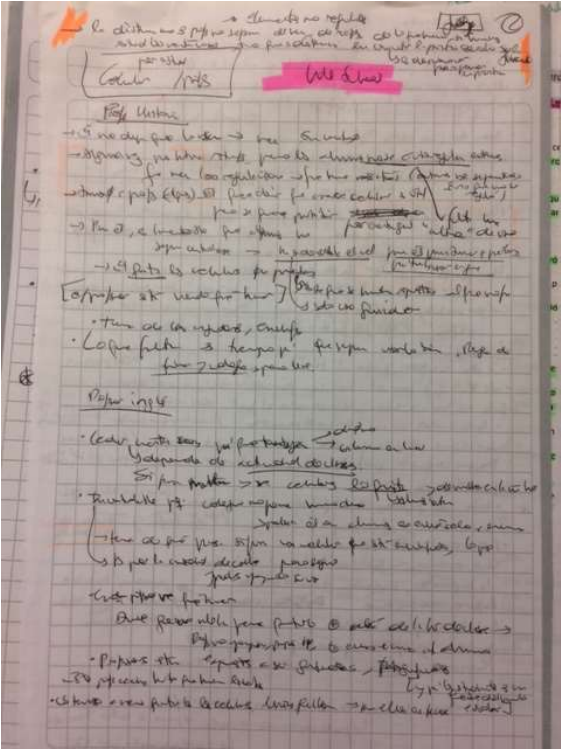
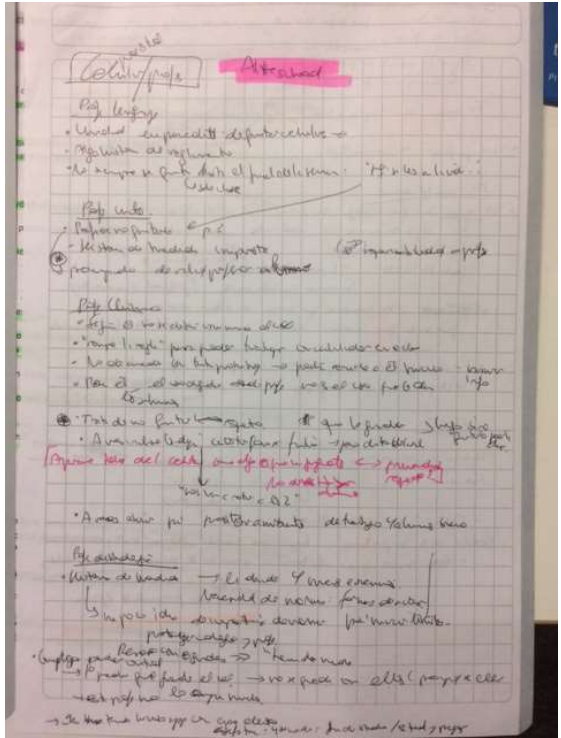


Figure K.5.: Excerpt of memoing from the code “Students, regulations and perceptions”, teachers’ interviews, Alte school.



Appendix L: Examples of narrative composites

Narratives composites were written originally in English based on each class timetable (Appendix N) and filled out with individual observational data of each direct participant. My idea was to match the time of the modules time with that of observations (during different days) to create a “typical school day” per each direct participant. Subjects match the ones observed during fieldwork, but do not make a real school day if taken together. Tables L.1. and L.2. present two full narrative composites: Vicho from Alte school and Rosa-Maria from Vite school.

Table L.1.: Vicho’s narrative composite, Alte school.

I. 8.15 – 9.00 History	<p>The teacher uses Power Point slides to revise the content on “The Organisation of the Republic in Chile”. Then she delivers new content about the period of “Anarchy”.</p> <p>Vicho is sitting in one of middle rows inside the classroom. He moved from his usual seat at the back (same row) to sit next to BE a couple of desks forward. He is wearing earphones in one ear. He is wearing it on the side that it is less visible from the teachers’ location. During the whole class, he has been quiet, taking notes. I did not even saw him talking to his friend next to him.</p>
II. 9.00 – 9.45 Orientation	<p>Teacher offers students to revise for history test or biology presentation they will have later on this day. She says though that the people who owe the worksheet from the previous class have to hand it to her during this session.</p> <p>Vicho is now sitting with NE, at the back of the classroom, next to the window. They are not studying, neither preparing the presentation nor completing the worksheet. They are both taking selfies, using Vicho’s phone. They keep chatting and taking pictures the whole lesson. The teacher is sitting in the front desk, writing down. She does not say anything to them.</p> <p>Vicho and NE at some point stop taking pictures, but they start seeing some pictures, each of them in their own phone. Then they chat again, while showing to each other things on their phones. At the very end of the class, Vicho is reading a notebook, while hugging Noe, who is just taking a look elsewhere.</p>
III. 9.45 – 10.00 Break	<p>Classroom</p> <p>Vicho is with BA, PO, and F in the middle of the classroom. Some of them are sitting in the chair, others are on the desks. Vicho and BA are wearing earphones while chatting with the others. Sometimes they look at something in one of their phones, at other times –or even at the same time– they check their phones individually.</p>
IV. 10.00. – 10.45 Mathematics (originally until 11.30)	<p>Teacher took a while before starting the class. He delivers new content (mathematical operations using square root). The class is a bit messy; he tells off students once in a while.</p> <p>Vicho is paying attention, taking notes. Towards the end of the class, every time the teacher faces the whiteboard, C and Y throw orange peel to different classmates. At one point, they throw some to Vicho and BE., who are sitting next to each other. They make gestures to make C and Y stop doing it.</p>
V. 10.45 – 11.30 Orientation (originally at 9.00)	<p>The teacher asks the students what they thought about the movie they saw in the previous class (about a teenage girl who meets in person a man from an online chat). After this, the teacher hands out a worksheet with 8 questions on the movie that students must answer in groups.</p> <p>Vicho is now at the front desk of the left row (facing the whiteboard). When the teacher asks the students to work in groups, IF, who is seated behind Vicho, asks him to join their group with T and IM, and Antonia (this not his regular group of friends). He accepts.</p> <p>They start talking about “words that look weird”, nothing to do with the movie. Vicho almost does not talk. Sometimes, when he is asked about something, he replies using a few words. Then, Antonia, IM, and IF start talking about a few times Antonia has met people she met originally online. They use it as examples to talk about the movie. Vicho just put some faces, but does not talk. It seems that for him what Antonia has done is not something he is familiar with. He looks surprised.</p>

VI. 11.30 – 11.45 Break	Classroom Vicente stays in the classroom with his friends: BA, F, PO., BE., RO. This time, some girls also join them: CU, VA, and A. They start joking around and chatting. While conversations are held, BA and Vicho are listening to music, each of them from their respective phones. They are wearing their earphones only in one ear each. In the meanwhile, they are sharing videos, photos, memes from their phones. Then they join the group's conversations. The conversations go from one topic to another, with phones as the basis of the conversation. In between, BE is also playing a game on his phone.
VII. 11.45- 13.15 English	In this class, the Technology teacher asks the English teacher if he could take some students out of class to finish painting some panels for National Celebrations. The English teacher accepts. Only 7 students remain in the classroom. I go outside the classroom as Vicho is one of the students in charge of painting. Vicho is part of the group of students in charge of designing, drawing, and painting three big fabric panels for the National Celebrations. They are working in the <i>patio de musica</i> ("music yard"). Two out of three panels are being painted here. The third one is in the science lab. Each panel represents a geographical area of Chile (North, Centre and South). Vicho is painting with other classmates with rolled-up sleeves. He and everyone else there look very stressed.
VIII. 13.15 – 14.10 Lunchtime	Classroom Vicho and his friends (BE, F, PO, RO) are playing games on their phones. One of them is using Vicho's phone. Vicho and the others are playing and taking a look at BE's phone. Meanwhile, some of them are wearing earphones in one ear. BE is playing guitar next to all of them. At some point, BE asks Vicho for his phone to look for a guitar tab to play his guitar.
IX. 14.10 – 14.55 History (originally from 12.30 to 14.00)	Four groups of students have to present on assigned topics about 19th century history of Chile. While groups are presenting, there is relative calm, but in between presentations, it gets noisy. While other groups presented, Vicho is quiet, sometimes checking his phone. Vicho's group are BA, RO, BE, and PO. Their presentation is on the incorporation of Chiloe island and the Strait of Magellan to Chilean jurisdiction. You can tell their presentation has not been rehearsed. Only RO and PO did not read from a sheet of paper during the presentation. Vicho read almost everything. After the presentation, the teacher tells them off because they read, and because they did not summarise the information on the slides making a link with the current historical or political moment.
X. 14.55 – 15.40 Biology (originally from 10 to 11.30)	The teacher asks the students to take out their notebook and the worksheet they have been working on since last week. Five minutes before the class finishes, she projects the answers to the questions. Vicho is now sitting next to RO, in one of the middle rows. Unlike his friend, he is not wearing earphones this time. He works on the worksheet with RO, BA, and PO. They work on the worksheet together. Vicho is very quiet. He ended up working with PO alone, while checking on PO's notebook.
XI. 15.40 – 15.50 Break (originally lunchbreak)	Classroom Vicho is next to his group of friends while reading manga on his phone. He spent the break like this, while his friends are chatting and listening to music.
XII. 15.50 – 17.20 Physics (originally until 16.35)	He hands a graded exam to the students and then projects the results on the whiteboard. Afterwards, he solves some exercises for the test tomorrow. Students are mostly copying. Vicho is back on his seat at the bottom of the classroom in one of the middle rows, next to F. He is taking notes and paying attention, and once on a while checking his phone. When the teacher leaves the classroom, he asks some of his friends, including F, to join him and shows them something on his phone.

Table L.2.: Rosa-Maria's narrative composite, Vite school

<p>I. 8.00 – 8.45 Arts & Music (originally until 9.30)</p>	<p>Arts and Music classes take place in the school diner . Arts students are working on a project on diseases on one side of the room. Music students are doing different things. The music teacher is focusing on a group of students (four) who are rehearsing for a band performance they have later.</p> <p>Rosa-Maria is part of the group preparing the performance. A friend is applying some make-up to her. In the meantime, the music teacher is giving the group (4) some instructions for later. Rosa-Maria is the singer of the band. They will play some rock-style music in the next break.</p> <p>Once the four members of the band are dressed, they start rehearsing the songs. They play a song by the Rolling Stones, then another by Green Day. Music students are singing along and some of them are taking pictures or recording videos with their phones.</p> <p>By the end of the class, the band goes outside and rehearse one more time in the school yard before the break.</p>
<p>II. 8.45 – 9.30 History (originally from 8.00)</p>	<p>The teacher delivers a new unit on the “Liberal Republic” in Chile. Most of the time he is just presenting. After this, the teacher asks students to keep answering some questions from the previous class individually.</p> <p>While the teacher delivers the lesson, Rosa-Maria is paying attention and taking notes. Once the activity starts, PA approaches to Rosa-Maria and asks her if she would like to check her homework (for mathematics) now or later [it seems that Rosa-Maria asks PA for this earlier]. Rosa-Maria says that she'll do so later.</p> <p>Rosa-Maria answers the questions in her notebook, using the textbook as guide. She finishes doing this around 20 minutes before the end of the session. She then joins to a conversation her friends seated next to her are having (Constanza, ST, MON, SCK, and AM). They are talking about books. Rosa-Maria talks about the last book she read: “it was the first time I read a Saga”, she says. Suddenly, Rosa-Maria stands up and approaches PA to compare her homework with hers. She then compares her homework with a couple of other friends from the same row, while spending some time chatting with them about other stuff.</p>
<p>III. 9.30 – 9.50 Break (originally at 11.20)</p>	<p>Just outside the classroom.</p> <p>Rosa-Maria is sitting on the floor with a group of friends (PA, MON, and FR). They are talking, while Rosa-Maria is checking her WhatsApp and texting. She suddenly interrupts her friends and tells them about who is she texting to. She says that V is in the “M school” and she is telling her that with her classmates they are now going to the infirmary because none of them did a homework. Rosa-Maria and her friends laugh and start talking about that.</p> <p>After this, Rosa-Maria watches a video about two dogs singing, while she is wearing earphones. Then, she shows it to MON and shares one of her earphones with her.</p>
<p>IV. 9.50 – 11.20 English</p>	<p>The teacher explains to the students they will be reading a short novel individually for a forthcoming reading test. In the meantime, the teacher is assessing some outstanding presentations by some groups (short dialogue). He calls out each group and they present quietly to the teacher.</p> <p>Rosa-Maria is reading in silence, while at some points, friends sitting next to her ask her for the meaning of some words in Spanish. She has some short conversations with them as well in between.</p> <p>The teacher informs the group of Rosa-Maria (with ST and Constanza) that they will be presenting their dialogue soon. So, they start rehearsing quietly in their seats. Then, they present in front of the teacher.</p> <p>When they come back, Rosa-Maria reads the book and chats with friends. She finishes the book before everyone else. F, PN, MAU, and MAR notice this and ask her to summarise the plot of the book to them. She does and PN takes notes. Later, MAU joins him and starts taking notes as well. She finishes the summary and starts using her phone. She is interrupted by JJ, who comes from the other side of the classroom and asks her to tell him the summary. He starts audio-recording the summary with his phone. Her friends ST, Constanza, and Simona join them and listen. After JJ, Rosa-Maria tells MX what the book is about.</p>

V. 11.20 – 11.40 Break	<p>Just outside the classroom.</p> <p>Rosa-Maria is sitting on the floor, leaning on the wall next to the classroom door. She is sitting next to PA. They are talking, while Rosa-Maria is doing some homework for a class later.</p>
VI. 11.40 – 13.10 Mathematics	<p>There are two teachers in the classroom. One delivers the lesson (teacher 1), while the other does some admin work in the “teacher’s desk” (teacher 2). The session is divided into two parts. During the first part, teacher 1 delivers new content; in the second half, the students have to solve some maths exercises from the textbook in their notebooks.</p> <p>Before the class starts, teacher 1 hands out some graded tests. Rosa-Maria is talking with a friend seated in front of her. Both are checking their phones. Her friend (MON) says: “Rosa-Maria, you deleted them!”. They are talking about some photos. MON asks Rosa-Maria to check for her in a social network, because she is not a member.</p> <p>Once the class starts, Rosa-Maria is paying attention, taking notes, and checking her phone regularly. At one point, teacher 1 calls Rosa-Maria’s attention: “I guess Miss... that you got the result it says in the book”. Rosa-Maria very calmly stops using her phone, and she does not say anything back.</p> <p>After this, Rosa-Maria checks her phone less. She keeps working on the exercises. MAU asks her if she got a certain result in one of the exercises.</p> <p>When Rosa-Maria finishes the exercises, she reads a novel in her seat. She discusses it with MON, who is sitting in front of her.</p>
VII. 13.10 – 13.55 Lunchtime	<p>School diner</p> <p>Rosa-Maria is seated in the designated table for Year 11 in the school diner. She is with almost all her group of friends (Constanza, PO, PA, MON, Simona, ST, and SCK) and JJ. All of them take their phone out while having lunch. Rosa-Maria is also writing some notes on a notebook. There are drawings, and in each page, there is a different map.</p> <p>Rosa-Maria shows a map of United States on her phone to Constanza and MON, and asks them which state they would like to be. Rosa-Maria is creating characters for the novel she is writing. The characters. are inspired by her friends.</p>
VIII. 13.55 – 15.25 Chemistry	<p>Teacher asks students to work on a worksheet in pairs.</p> <p>Rosa-Maria is working by herself, although she is in between chatting with the friends sitting next to her. They ask each other things about the worksheet.</p> <p>At some points, classmates from other parts of the classroom approach Rosa-Maria to ask her things about the worksheet.</p>
IX. 15.25 – 15.35 Break (originally lunchtime)	<p>Just outside the classroom.</p> <p>Rosa-Maria is sitting on the floor with a friend. Both are playing games on their phones. They talk also in between.</p>
X. 15.35 – 16.20 Orientation (originally at 11.40)	<p>The students’ reps discuss three topics with the whole class (<i>poleron del curso, rifa falabella, & costumes for national celebrations</i>). Then the teacher checks the class arrears. Finally, students can work on any behind work they have (several students were already doing this from the beginning).</p> <p>Rosa-Maria is paying attention to what the students’ reps are discussing. She gets involved along with ST when they talk about the outfit the girls have to wear for the National celebration’s dance. ST and her check on their Whatsapp group, saying that this has been discussed online before and that the “women” [probably the person helping them deal with this issue] sorted out the issue. They say that they agreed on a black skirt for sure.</p> <p>Once the teacher starts talking and afterwards, Rosa-Maria works on her biology homework, while checking her phone and talking with some friends.</p>

Appendix M: Ethics form submitted to School of Education, University of Bristol.

This form was submitted to be reviewed and approved by the School of Education's ethics committee in April 2015.

SoE RESEARCH ETHICS FORM

Name(s): Paulina Ruiz

Proposed research project: Digital practices and identities in the school setting. An ethnographic study with Chilean students.

Proposed funder(s): -----

Discussant for the ethics meeting: Maribel González

Name of supervisors: Prof. Sally Barnes and Dr. Sue Timmis

Has your supervisor seen this submitted draft of your ethics application? Yes

Please include an outline of the project or append a short (1 page) summary:

This study aims to explore how digital technologies are being used by Chilean adolescents to communicate and interact with school-peers in different contexts, and how these digital practices are shaped by the school setting. In order to conduct this research a socio-cultural approach is taken.

In terms of the methodology, the research will use an Ethnographic approach in one Chilean school. The participants will be 6 students from the same tutor group of 10th grade (15-16 years old). The fieldwork will take place this year (2015) over three months, where the following methods will be conducted: observations; shadowing; individual and group interviews; and collection of artefacts. Data collection will take place mainly within the school setting. However, some shadowing with participants will take place in out-of-school settings that appear to be important for peer interactions with digital technologies, such as home. Finally, for data analysis, thematic analysis, rich point analysis and member checking will be conducted to make sense of the different kind of data.

Ethical issues will be considered throughout the research process, from its design to the report of findings, namely: access to participants; informed consents; privacy and confidentiality; rapport with participants; role of the researcher; data processing; and dissemination.

The findings of this research will contribute with new knowledge about how young people are using digital technologies in different settings, generating a more in-depth understanding of how they interact with others in socio-cultural and interconnected spaces. Moreover, the evidence from this project might serve to analyse existing programmes and policies in the field of youth and educational technology in Chile and elsewhere. Finally, the findings might serve as a basis for a new line of research in the Chilean research field within the research field on young people and technologies.

Ethical issues discussed and decisions taken (see list of prompts overleaf):

The discussion with my fellow researcher was based on a first draft of the Ethics chapter of my progression document. In this chapter, I identified the main issues to consider and reflect on when researching with under-aged participants. This process was informed by specialised literature on the field of research with children and young people (e.g. Heath et al., 2007), as well as GSoE guidelines and suggested literature (Hill, 2005). Additionally, the British ethical guidelines for educational research (BERA, 2011) and Chilean ethical guidelines on informed consents (FONDECYT, nd) and confidentiality (FONDECYT, 2011) were considered. No ethical guidelines for educational research or research with children and young people were found for the Chilean context.

We discussed the ethical issues mentioned above in detail, focusing particularly in access to participants, informed consents, confidentiality and dissemination of information to schools actors.

Regarding the access to participants, since the interest of the research is on the school setting, the use of the school as a gatekeeper seemed reasonable. In this sense, the figure of the Head-teacher is a key one to get the permission to work in the school during fieldwork. At the same time, getting permission from the teacher in charge of the tutor group where participants are based appears as a good practice. Generating a good rapport with this actor seems important since she/he could have a crucial role coordinating and engaging students during data collection. However, -during the discussion- other teachers who do classes to participants appeared as important actors to get in touch with before data collection as well. In this sense, I added -to my original idea of getting permission from the school's Head-teacher and the teacher in charge- a meeting with the school's staff as a way to introduce myself and my project, and to generate trust.

Related to this, we discussed about the importance of face-to-face contact in Chilean culture in general, and particularly within educational institutions in order to generate trust bonds. To this regard, extra time before data collection in Chile appeared as an important element to consider carrying out introductory meetings with the school's staff, the whole tutor group, participants and their families. Thus, together with getting signed authorisation letters from school professionals, and informed consent from participants and one family member, it is crucial to have face-to-face encounters with the people directly and indirectly involved in the fieldwork.

Although data collection process can be seen as a flexible and out-going process because of its ethnographic nature, we discussed that it is important to plan as much as possible to provide an in-detail picture of the fieldwork's activities to all the actors mentioned earlier. Particularly for school actors, it is very important to let them know that this research has no assessment elements or consequences for the school or teachers. Moreover, the shadowing technique -which entails following participants in their daily

activities across different settings inside and outside schools- could be of especial interest to teachers and families, so it is crucial the way it will be explained to them in-depth.

Other topic we focused our attention to was confidentiality. We considered that for this research this topic goes beyond anonymity in presentations and reports, and it has to do also with maintaining participants' results in private during the whole data collection process. As stated above, this research will include member checking with participants. This entails discussing individually with them preliminary results during interviews, but it will be agreed with them not to disclosure any data to other participants, as well as to school actors and families. To this respect, it is important to make this point clear in advance to all the actors involved in the research. In other words, the final version of the dissertation will be offered to them, but not any intermediate findings or results, except to participants. In this sense, any meeting or final debriefing with school practitioners or family members will be focus on coordination or summarising activities and not research's results.

Finally, we discussed on the use of member checking with participants in relation to the philosophical approach of this research. My fellow researcher agreed with me in the importance of involving them in the discussion of preliminary findings and reflections since the research sees them as interpreters and social actors within their cultural worlds. In relation to their active role in the interpretation of data, we also talk about having a final interview with each participant to sum up the interpretations elaborated during fieldwork. Additionally, it seems appropriate to arrange a final meeting with all the participants to let them see the importance of their participation for the research field.

After this meeting, I re-elaborated the ethics chapter taking into account the issues I discussed with my fellow researcher. Both of my supervisors read the new and subsequent versions of the chapter. I received a positive feedback from them. They highlighted my awareness of power imbalance associated in adult-young people relationship, as well as of the unexpected events every research has, but which are especially crucial when researching with adolescents using an ethnographic approach. However, they suggested me to address in a clearer way about the role that the participants' classmates will have in the research. They suggested me to see them as a second level of participants since they will be in touch with me throughout the whole data collection process and be indirectly involved when studying participant's interactions with them as school peers.

If you feel you need to discuss any issue further, or to highlight difficulties, please contact the GSoE's ethics co-ordinators who will suggest possible ways forward.

Signed: [Paulina Ruiz] (Researcher) Signed: [Maribel González] (Discussant)

Date: 10.04.2015

Appendix N: Classes timetables

Table N.1.: Year-11 timetable, Vite school, 2015

Hours	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 - 8: 45	Language*	History	Arts & Music	English	PSU Language****
8:45 - 9:30					
9:30 - 9:50	BREAK				
9:50 - 10:35	Biology	English**	Physical Education	Language	Physics
10:35 - 11:20					
11:20 - 11:40	BREAK				
11:40 - 12:25	Mathematics	Tutor time***	Mathematics	History	Religion
12:25- 13:10		Mathematics			PSU Mathematics****
13:10 - 13:55	LUNCH				
13:55 - 14:40	Physical Education	Mathematics	Language	Chemistry	
14:40 - 15:25					
15:25 - 15:35	BREAK				
15:35 - 16:20	Religion	Biology	Technology+++		

Source: Contact person

Table N.2.: Year-11 timetable, Alte school, 2015

Hours	Monday	Tuesday	Wednesday	Thursday	Friday
08:00 – 08:15	Tutor teacher+	Tutor teacher	Tutor teacher	Tutor teacher	Tutor teacher
08:15 - 09:00	Physical Education	Mathematics	History	Language*	Language
09:00 – 09:45			Orientation++	Chemistry	
09:45 - 10:00	BREAK				
10:00 - 10:45	Geometry	Technology+++	Mathematics	Biology	Chemistry
10:45 - 11:30					
11:30 – 11:45	BREAK				
11:45 – 12:30	Visual Arts	English**	Biology	Physical Education	Physics
12:30 – 13:15			History		
13:15 – 14:00	LUNCH	LUNCH			LUNCH
14:00 - 14:10	BREAK	BREAK	BREAK		
14:10 – 14:55	English	Orientation++	Tutor time ***		
14:55 – 15:40		PSU Language****	Mathematics		
15:40 – 15:50	BREAK	BREAK	BREAK		
15:50 – 16:35	Economy	Language	Physics		
16:35 – 17:20	History		PSU Mathematics****		

Source: Contact person

Legend for both tables:

*Language subject would be equivalent to Spanish Language and Literature.

**English subject would be equivalent to Modern Language English.

*** Tutor time is a module led by the tutor teacher in which her or the students can bring class-related issues.

****PSU Language and PSU Mathematics are modules in which students revise or have mock exams to prepare for the University entrance test. PSU stands for *Prueba de Selección Universitaria* (University Selection Test).

+ "Tutor teacher" was a 15-minute module each morning in which the tutor teacher gave information about certain topics and took the register.

++Closest equivalent in British curriculum to Orientation would be the Personal, Social and Health Education (PSHE) subject.

+++ Technology is a subject that aims students to understand the relationship between human and the "artificial" worlds. It covers areas such as design and engineering, and the Humanities perspective on technology.

Appendix O: Days of observation per school

Day of observation*	Vite school	Alte school	<p>* Days of observations for each school are independent from each other. For example, day 1 in Vite school is not the same day 1 as in Alte school. Moreover, days of observations for each school are not consecutive days.</p> <p>**Subjects and breaks observed per day, in most of the cases are consecutives observations, but not in all the cases.</p> <p>***To calculate the total number of subjects observed on table 4.4. (Alte school= 12), <i>PSU Language</i> and <i>PSU Mathematics</i> were considered as Language and Geometry, respectively. This is because the class was conducted by the same respective teachers and in practice, although sometimes students worked on preparing for PSU test (University Selection Test), most of the time teachers and students just kept working on whatever was left from Language and Geometry.</p>
Day 1**	English Break Tutor time Mathematics Lunchtime	Physical Education Lunchtime Mathematics Break Physics PSU Mathematics***	
Day 2	Arts & Music Break Physical Education	Chemistry Break Physics	
Day 3	Language Break Lunchtime Chemistry	English Lunchtime Orientation PSU Language***	
Day 4	Biology Break Mathematics Lunchtime	Lunchtime Orientation PSU Language Break Language	
Day 5	English Break Language Break History	History Orientation Break Mathematics Break History	
Day 6	History Break English Break	Break Biology Break Lunchtime	
Day 7	Physical Education	Arts Lunchtime English Break	
Day 8	Language	Language	
Day 9	Language Break Biology Break	Language Chemistry Break Biology Lunchtime Tutor time Mathematics Break	
Day 10	Tutor time	Geometry Break Arts Lunchtime	
Day 11	Arts & Music Mathematics Lunchtime	Break Lunchtime Orientation	
Day 12	Mathematics Lunchtime Language Break	Orientation Break Biology History	
Day 13	English Break Language Chemistry Break	PSU Language Break	
Day 14	--	History Orientation Break History	
Day 15	--	Tutor time Break PSU Mathematics	